

how to think in CHESS

by
**Jan Przewoznik and
Marek Soszynski**

How to Think in Chess

Jan Przewoznik
and
Marek Soszynski

Foreword by
Jon Levitt



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How to Think in Chess

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Foreword

The game of chess is fascinating on many different levels. From the logic of tactical calculation to the depth of strategic conceptions, from the beauty of refined play in an endgame study to the cut and thrust of competitive play, from the evolution of opening theory to the idiosyncrasies of the World Champions...it is all part of what goes underneath the umbrella term of “chess.”

But whatever we find intriguing about chess...whatever captures our imagination...does so because of the way our individual brains work. For this reason the psychology of chess is always going to be a complex and compelling subject.

“Psychology” is, of course, another term that can encompass a very wide range of issues. At one moment in Jan Przewoznik and Marek Soszynski’s book you might be reading what seems like a self-help text, learning to overcome mental blocks or reading advice on how to deal with competitive stress. At another moment you might be examining the thinking “protocols” of strong players as they analyse a critical position in depth.

As an improving player many years ago (sadly I cannot describe myself in those terms any more) I remember being very critical of my own thinking process in chess. Indeed, any serious player must examine with great care the way he or she thinks at the board. Sometimes to improve performance you have to observe yourself objectively and find something to “tweak.” Then you can observe the way your game changes as a result and try the same process all over again. If a teacher does not give you the necessary feedback, then you can always generate some for yourself. Tournament results and the happiness or suffering they induce also give you valuable feedback, even if not always pleasant.

From the perspective of improving one’s own game, it can be very helpful to see how other players think and to understand the typical processes that make up chess thinking. Learning about “anticipation” or “progressive deepening” might even benefit your game. Stepping back for a few minutes and taking a wider perspective of yourself as one of many human brains struggling to master the complexities of our game might be more rewarding to you as a player than analysing Ivanchuk’s 18.♠dg1! against the Najdorf Sicilian. Maybe. It depends on the sort of person you are and how you like to tackle things.

You should be warned however that this is not an entirely normal chess book and certain parts of it have more the feel of academic esoterica. Some of the protocol analysis, for example, is very detailed and may not seem at all helpful to the improving player (it might of course be of interest to a psychologist or a computer programmer). The section on sports psychology is of more practical value and may help players freshen up their approach or introduce a touch more creativity into their play.

A book such as this can reveal a great deal to the intelligent reader, be he a player who wants to improve, a chess teacher who wants somebody else to improve or even a psychologist who just wants to observe the thinking brain in action. There is something for everybody, even if certain parts of it may not appeal to all.

As someone who has written on chess psychology myself (in the book *Genius in Chess* published by Batsford), I know how much is owed by anyone working in this field to the great pioneer of chess psychology, Adriaan De Groot. You will see his name and methods crop up again and again here... a sure sign that Przewoznik and Soszynski are following the time-honoured method of building on what has gone before by "standing on the shoulders of giants." The authors have their own contribution to make too, as I am sure readers will discover for themselves.

Jon Levitt
London
February 2001

Preface

This book grew out of Jan Przewoznik's writings on the subject of chess thinking that first appeared in various Polish magazines, journals, and books. That material was translated into English by Marek Soszynski, and then much amended, rewritten and expanded by us both.

We should like to thank the many people who made this book possible. Primarily, grateful recognition must be paid to the dozens and dozens of chessplayers, both adults and juniors, male and female, with or without titles, who agreed to take part in various psychological tests and training experiments. They helped to ensure that this book is not merely empty theorizing, but is empirically based. Our further thanks go to Jon Levitt for providing a foreword and to Taylor Kingston, Warren Clarke, Mike Donnelly and others, who made useful suggestions and comments on drafts of the English text. Due acknowledgment is also given here of the permission granted by the Mouton de Gruyter publishing house to quote from Adriaan de Groot's classic work, *Thought and Choice in Chess*.

We realize that we have only scratched the surface of chess psychology, and only scratched it at a few, convenient places. However, our aim has been not an exhaustive volume of academic reference, but a book that while unusual or demanding in places, is ultimately of intelligent, practical help. We firmly believe that absolutely anyone who is willing to train systematically in order to improve his chess, is receptive to psychological examples and therapeutic advice, but above all is prepared to *think* about the game and his own approach to it, will certainly benefit from this book.

Jan Przewoznik
Marek Soszynski
February 2001

I Introduction

How to think in chess? This question has the broadest possible range. At one extreme it refers to the immediate problem facing every chessplayer with an ounce of fight left in him – what move to play next on the board. At the other extreme it refers to the lifelong problem facing every player with an ounce of ambition left in him – what move to make next in one’s development.

If you want to get better, you have to change. And you have to change because some of what you do now is flawed or second-best. But which part of your thinking is not quite right? *Know thyself* is a developmental principle familiar since the days of Socrates, and its worth is repeatedly proved in many walks of life. It is obligatory in chess training, when it is worthwhile noting not only what you do, but also how you are doing it, how you think, and how you solve problems. This very necessary self-knowledge applies both to minute details (of individual moves, and immediate game plans) and to the overall picture (of your character, and your future chess career). Unless you know where you are, and where you want to go, progress is impossible.

Let us begin with the thinking that takes place during a game. The moves on a chessboard can be praised or criticized in isolation, but they are the result of thought processes that can and must themselves be investigated. Here we draw on the classic research of the Dutch psychologist and chessplayer, Adriaan de Groot. Around the time of the famous AVRO tournament in 1938, and later, he was able to question several of the world’s top players (Alexander Alekhine, Max Euwe, Reuben Fine, Salo Flohr, Paul Keres, and Saviely Tartakower) subject them to various chess tests and then compare their responses and results with those of weaker players (such as two female Dutch champions). One outcome was unexpected. To put it very briefly, when deciding on a move, the stronger players did not calculate any deeper than the weaker ones. The Grandmasters could memorize positions from typical games very well indeed, and seemed to have a huge internal store of arrangements and patterns of pieces (or “chunks”), but de Groot did not find that they analyzed more or longer variations than the others. This finding still has the power to surprise even today.

Please do not misunderstand this. Strong players *can* calculate deeper –

and faster, with fewer errors – than weaker players, but that cannot be the entire explanation for some top Grandmaster rapidly annihilating strong opposition in a simultaneous display. Just because titled players *can* calculate deeply, does not mean that they *do* that all the time in all their games, nor can their calculatory ability alone be the reason for their success. Take a quick glance at the following examples.

Najdorf–Pilz, Warsaw, 1934

1.d4 ♘f6 2.c4 e6 3.♗c3 ♘b4 4.♙c2 c5 5.d×c5 ♘×c5 6.♗f3 d5
7.♙g5 d×c4 8.e3 0-0 9.♘c4 ♗bd7 10.0-0 h6 11.♘h4 ♙a5 12.a3
♙e7 13.b4 ♙b6 14.♙fd1 a5 15.♙ab1 a×b4 16.a×b4 ♗h8 17.♗b5
♗b8 18.♙g3 ♗a6 19.♙d6 ♗g8 20.♗e5 g6 21.♙×e7 ♗×e7
22.♙d6 ♗c6 23.♗×g6+ f×g6 24.♙×g6 ♗a×b4 25.♙×h6+ ♗g8
26.♙×e6 ♙×e6 27.♙×e6+ ♙f7 28.♙g6+ ♗h8 29.♙×f7 1-0.

“This game was awarded the first brilliancy prize and nobody was more surprised than me since I can remember at no time seeing more than two moves ahead.” Thus reported Miguel Najdorf (*Chess Monthly*, September 1992).

Nunn–Tal, Wijk aan Zee, 1982

1.e4 c5 2.♗f3 e6 3.d4 c×d4 4.♗×d4 ♗c6 5.♗c3 a6 6.g3 ♙c7
7.♙g2 ♗f6 8.0-0 h6 9.♗b3 ♙e7 10.a4 d6 11.f4 0-0 12.g4 ♙d7
13.h4 b5 14.g5 ♗h7 15.♙e3 b4 16.♗e2 d5 17.e×d5 e×d5
18.♙×d5 ♙ac8 19.a5 ♗b8 20.♗ed4 ♙g4 21.♙ae1 ♙fd8 22.♙e4
♙e8 23.♙f2 ♙d7 24.♙d5 ♙d6 25.♗f5 ♙×d5 26.♗×e7+ ♙×e7
27.♙×d5 ♙×e1 28.♙×e1 ♙×c2 29.♙e7 ♙c6 30.♙×f7+ ♗f8
31.♙c7 h×g5 32.♙c5+ 1-0.

“So far as I can remember,” wrote the winner in his *Secrets of Grandmaster Chess*, “I hardly calculated a single variation more than a couple of moves deep during the entire course of the game.” (Admittedly, this was not typical for the tactically oriented John Nunn.)

There is another important finding by de Groot, which has been confirmed again and again by later researchers. Chessplayers, including the very best, do not as a rule immediately make a short and neat mental list of candidate moves that they then consider one at a time, just the once.

This is simply not how people approach most problems, nor is there any reason why they should approach all problems that way. It is just one solving method among many; we give examples of more practical ones in Chapter III.

Why so many approaches to the problem of which move to play next? Why not a single, “true” way? Well, since many of the tactical and positional features of a position persist, what is discovered when weighing one line in detail may be relevant to the analysis of another line considered earlier; that other line will then deserve a second look. Inevitably, the same lines will be reconsidered; rightly, the human player will re-check his conclusions. These are not defects in a chessplayer’s thinking that ought to be criticized and trained out. And often when studying a specific strategy or a combination, some thought has to be given as to which move will initiate the whole thing, whereas the general idea or theme is already clear. In other words, a prior selection had been made from among candidate *plans* rather than moves. A player may quite reasonably have decided that his best prospects in a particular game lie either in central consolidation, or in a queenside minority attack, for instance. Clearly, this was not simply a choice between two next moves.

In Chapter II, four positions will be presented for solo analysis using the method of thinking aloud. Detailed analyses of these positions will be given, and then a specific way of analyzing chess thinking will be presented, according to which the reader will be able to evaluate his own thinking during the solving of problems, and decide the direction of further self-developmental work.

Of course, de Groot was aware that the method of thinking aloud creates certain difficulties, due to the need to think and verbalize simultaneously. In general, though, the subjects acknowledged that their decision-making process in the experiment corresponded to that of the tournament situation.

De Groot’s studies were not widely discussed in the literature of either chess or psychology, but this seminal work deserves wider attention among chessplayers and psychologists interested in research into cognitive processes. It appears that the method of thinking aloud, although time-consuming and hard to carry out, can serve as a valuable complement to chess training.

The advantages of thinking aloud and protocol analysis

1. The method of thinking aloud, along with subsequent verbal protocol analyses, can develop in the chessplayer a habit of efficient, organized thought consciously applied in playing a chess game.
2. In critical positions, at decisive moments of the battle, the player can initiate a fixed procedure of thought, thereby becoming independent of his emotions or other factors that could disturb the thought process.
3. The trainer can gain an insight into the thought process of his young charge and discover how it progresses, something he would not discover if he concentrated only on the results of analysis.
4. The implementation of a certain methodological rigor during play, particularly at critical moments, can prevent time trouble (or cure it).
5. Using certain patterns of organized thinking does not at all curb creativity – quite the opposite. Skillfully put to good use, it can foster the discovery of original ideas.

Chapter IV is devoted to the application of the method of thinking in chess. The reader will be able to apply the recognized ways of thinking during the solving of the problems. The guiding watchword for all of the problems is *fantasy*.

Fantasy will never disappear from chess. There will always be innovators in this field gifted at finding unconventional means of unraveling problems that arise on the chessboard – eliciting admiration from impartial and knowledgeable observers. Such creativity lies in the very nature of chess. Whether we like it or not, amid the tournament scoreboards, rating points, categories, and norms of our chess world a prominent place is occupied by the aesthetic, artistic and truly creative.

In order to bring our own creativity to ever higher levels, we carefully study opening theory, the middle- and endgame; we examine a countless number of standard positions; we try to learn and memorize as many general principles as possible; we acquaint ourselves with the games of Grandmasters.

Imitation is desirable in acquiring chess knowledge. It is also very natural and ubiquitous in life. But we do not trouble ourselves with all these profitable things, developing our intellect, merely to copy long-established patterns of play and rehearse clichéd examples. What is required

of us is creativity! An original approach to recurrent problems, linked with the ability to set new ones. Much space in chess manuals is devoted to matters of a technical nature. A lot is said about isolated pawns, the “hanging center,” the domination of the bishop pair, the “good” and “bad” knight, and so forth. The conclusions become generalized. But so little is written about exceptions to the rule, about *paradoxes*.

It is precisely this somewhat neglected topic that is taken up in this section. We are not interested here in the situation where the player repeats and reproduces his previous experience and customary play. In the course of solving standard problems on the board, you make your way along familiar paths, sticking to well-known tried and tested procedures. Here we are not particularly concerned with this kind of imitative thinking, or “reproductive thinking” as psychologists put it.

What attracted us was the situation where a player looks for solutions hidden in “the depths,” in which workable options are in fact obscured by standard, entrenched patterns of thought. And the eventual outcome, the correct solution, at first seemed too improbable to be true. Which is why it was hard to foresee.

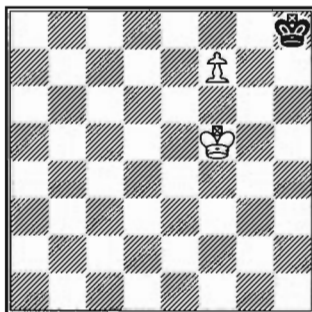
We searched for the right word to express best this state of affairs: it is *fantasy*. Fantasy in this context means the ability to imagine situations, incidents, whole series of events (let these be moves in a chess game) which are transformations, *enrichments*, of earlier experiences. The picturing to oneself of completely new situations or events. What is vital in fantasy is paradox, the conspicuous presentation of contradictions.

Fantasy is one of the essential conditions for creativity, whether literary, musical, artistic, or on the chessboard. With its help we can attack our fixed dogmas.

When first we encounter signs of chess fantasy, we experience cognitive dissonance. Here we come face to face with something alien to our previous views. In our eyes, basic principles of chess have been undermined. We stand amazed before the fact that a “short-legged” knight catches a “long-legged” bishop on the long diagonal; that a humble pawn, at a certain moment, proves to be stronger than a queen; and that a king in the opening, instead of hiding himself behind the last rampart, heads victoriously into battle, straight into the fire of the foreign army.

Yet after deeper analysis of each such individual case, we invariably come to the conclusion that what seemed irrational is really rational after all. Moves, strategies, and ideas that according to popular opinion go against principle and common sense, are actually guided by the different – initially imperceptible – demands of chessboard logic. One could say, to paraphrase the American philosopher John Dewey, that where old and familiar things take on the mark of the new, there we encounter fantasy. But when something new occurs, then distant and strange things become obvious and inevitable. And there is always a certain sense of adventure in intellectual contact with the world, and that adventure is what we here call fantasy.

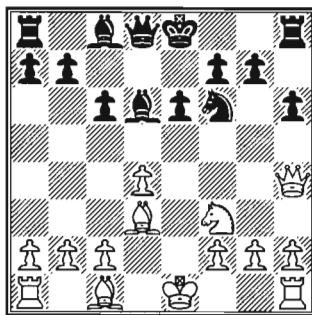
There are opportunities for fantasy, originality, enterprise, artistry, adventure, creativity, ingenuity – call it what you will – or merely something “a bit different,” at all stages of a chess game, *if* you are prepared to look for them. That is the case even in the very, very simplest of circumstances.



White could just queen with check, but in place of that there is **1.♖f6!** **♗h7** **2.f8=♖** **♗h6** **3.♖h8#**. This is not just being “flashy,” it is actually the quickest way to win.

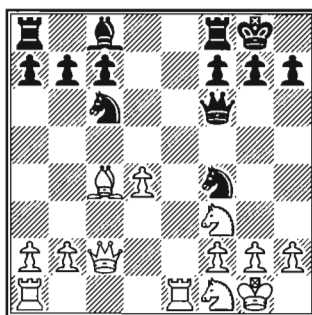
A certain line of the solid, “boring” Caro-Kann Defense was known to theory: **1.e4 c6** **2.d4 d5** **3.♟d2 dxe4** **4.♟xe4 ♟d7** **5.♟g5 ♟gf6** **6.♟d3 e6** **7.♟f3 ♟d6** **8.♟e2 h6** **9.♟e4 ♟xe4** **10.♟xe4 ♟f6** **11.♟h4**. Surely nothing out of the ordinary could happen here, as early as this? (See diagram top of next page.)

Since 11...0-0? is answered by **12.♟xh6 gxh6** **13.♟xh6** followed by **g2-g4-g5**, Black has to content himself with the mundane **11...♟c7**, or **11...♟a5+** **12.♟d2 ♟h5**. Or so it had been thought. And then in one



game Anatoly Karpov came up with **11...♔e7!?**, which threatens ...g7-g5 embarrassing the white queen (Kamsky–Karpov, Dortmund, 1993).

Next, a case of what we are stressing throughout – *seek and ye shall find*. Black to move.



At first glance White’s kingside formation appears somewhat vulnerable to a piece sacrifice on h3, but we imagine that Adolf Anderssen looked again to find something far stronger. **1...♖xg2!! 2.♔xg2 ♖xf3+! 3.♔g1 ♖xd4 4.♖e4 b5?** A pity. This also required a second look because it allows **5.♗d5 ♖xe4 6.♞xe4** when White would soon be only one pawn down. **5.♗d3? f5 6.♖xd4 ♗b7 0-1** (Saalbach–Anderssen, Leipzig, 1858).

To give the encounter with chess fantasy the character of an adventure, we decided on a chapter partly in the form of a test, forcing the reader to grapple with unusual problems.

For whom is that chapter intended? Above all, we hope it will interest a very broad group of self-taught chessplayers. Those more advanced may be bored at first with exercises none too difficult for them. They may not see any signs of fantasy in the solutions. But remember that the exercises were arranged from the easiest to the hardest. What is already obvious to

them, the less advanced have the chance to discover only now.

And those less advanced? They should cope well with the initial exercises, but later it will get tougher and tougher. Let them not lose heart! Through it they can determine their present stage of development, and what journey awaits them. In time they will be able to solve ever more exercises. And that can be a yardstick, a confirmation of progress.

We feel confident that this is the chapter for those who would rather not count the squandered points after a tournament, but instead encourage themselves with every brilliant, startling idea realized on the chessboard. Would this be the chapter then, for every fortunate chessplayer? With no losers amongst them? In the world of paradoxes everything is possible.

In the final chapter we propose the basic elements for self-improvement work in chess, incorporating psychological methods applied in sport and elsewhere. The principal directions for chess development will be considered.

First of all, there will be the skills of setting goals, and of positive thinking. If you want to be a winner, you have to think like one! You have to know where you are heading, and you have to realize, early on, that it is especially important how far you plan on going.

Secondly, not only awareness of the goal itself is important, but also awareness of the road to it. And here questions of character formation, and coping with stress, already arise. One must learn the skills to overcome obstacles, to maintain persistence, to extract satisfaction even from the smallest successes, and to correct one's direction when thrown off course.

Thirdly, on the road to one's goals, belief in oneself, in one's potential, in one's internal reserves, is of great significance to the chessplayer. The ability to construct a positive self-image is required here.

We hope that this book will make it easier for the chessplayer or his coach to work systematically at raising his own or his student's standard of play, and give him an opportunity to delve into the deeper question, *how do I actually think?*

II Solo Analysis

1. POSITIONS FOR SOLO ANALYSIS

Instructions

These are your instructions. You will be presented with four positions. With each one, you are allowed half an hour to set it up on a full-sized board, and to come up with a single best move, along with some plans and variations, etc.

It is very important to keep in mind that your task will be not only to select a move in each position, but also to express your thoughts aloud during its selection. These thoughts should be recorded on audio tape. The value of the examination depends to a large extent on reporting your thoughts precisely, especially the moves and variations considered. It is vital that you say out loud everything that comes to mind during selection of a move. We emphasize, all your thoughts about the position are important. Try to think as if it was a normal tournament game, but otherwise please speak about everything that you look at, that you verify or plan. Later, you will be able to subject your recorded thoughts to a thorough appraisal – that is the whole idea.

You should also note that these are not all tests of your skill at finding winning combinations. The situation is not necessarily “White to play and win – find the solution.” Whether the situation is really “positional” or “tactical,” and whether the game may be won, drawn, or lost remains for you to discover. The circumstances are close to tournament conditions: you have arrived at a certain position and play has to continue.

To get used to the novel situation of voicing your thoughts while studying a position, it is worthwhile practicing with some examples beforehand. If the method of thinking aloud causes you difficulties at first, practice with a few further examples in order to gain proficiency in reporting what you are thinking. Once you are satisfied that simultaneous analyzing and speaking does not cause you difficulties, we can start on the actual playing-out of a game.

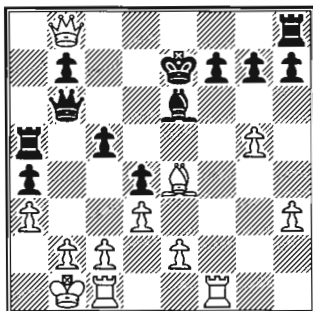
In each position White is to move; you will always be playing as White.

The thirty minutes you have per position to select a move is longer than may be practical in an actual game, but:

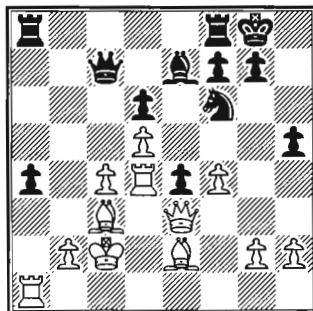
- i) in a game you will have seen the position being reached, and to that extent be already familiar with it;
- ii) speaking your thoughts out loud will probably slow your thinking somewhat. You still may not need the full time to decide, but remember that this is *not* a rapidplay or blitz!

Let us embark on the practical training then.

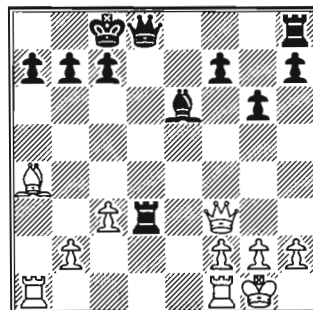
Position #1



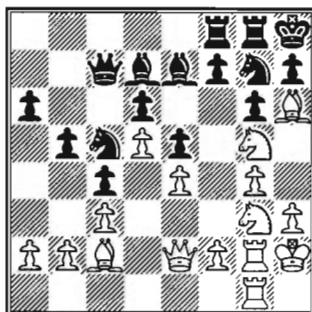
Position #2



Position #3



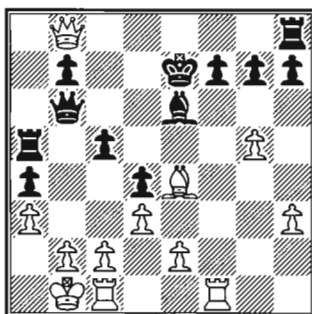
Position #4



2. ANALYSIS OF TRAINING POSITIONS SOLUTIONS

You will now be able to compare your own recorded analyses with those quoted below, which are based mostly on the much-amended protocols (i.e., transcripts) from co-author Jan Przewoznik's own researches carried out in the 1980s on a group of three dozen Polish chessplayers ranging from Category I to Grandmaster strength.

POSITION #1



In Position #1 it is not possible to take the rook on h8 since after 1. ♖xh8 ♜b5 White soon gets mated, e.g. 2. b4 ♜xb4+ 3. axb4 ♖xb4+ 4. ♔a1 ♖a3+ 5. ♔b1 ♖a2#. White also loses after the peaceful 1. ♖xb7 ♖xb7 2. ♙xb7 ♜b8 3. ♙c6 ♜b6 4. ♙e4 ♜ab5 and Black's threats down the b-file are decisive. After 1. ♖e5 c4 a counterattack down the f-file saves White: 2. ♜xf7+! ♔xf7 3. g6+! hxg6! 4. ♙xg6+ ♔e7 5. ♖xg7+ ♔d6 6. ♖xh8 c3 7. ♖b8+ ♔e7 8. ♖e8+; a draw by perpetual check ends the game.

It appears that White has difficulties. His king is threatened by dangers connected with the moves 1... ♜b5, 2... ♜xb2+, 3... ♜a2#. Besides which

his queen is *en prise*, so there is no time for the defense ♖a1, ♜b1. So one could have the impression that White's position is difficult. First let us see the game's conclusion.

1. ♖e5 c4 2. ♜xf7+! ♜xf7 3. g6+ ♜e8 4. ♖b8+ ♖d8 5. ♖xb7 ♖c8 6. ♙c6+ ♜d8 7. ♖xg7 ♜g8 8. ♖xd4+ ♜c7 9. g×h7 ♜d8 10. ♖c3 ♜b6 11. ♙b7! ♖b8 12. d×c4! ♖e5 13. ♖b4+ ♜a7 14. ♙d5! ♜a×d5 15. c×d5 ♖×d5 16. ♖×a4+ 1-0. (This is a colors-reversed version of Lutikov–Taimanov, USSR, 1969, i.e., Taimanov won the actual game as Black.)

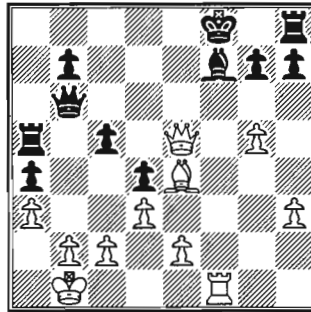
From the initial position the best move is 1. ♜xf7+!! – an immediate strike down the f-file. After 1... ♜xf7? White instantly solves all problems with the help of a counterattack, e.g., 2. ♜f1+ ♜e7 3. ♖xh8 ♜b5 4. ♖xg7+ ♜d6 5. ♖f8+ ♜d7 (if 5... ♜c7 6. ♖f4+ ♜d8 7. ♖c1!). Now White has draws by repetition starting with either 6. ♜a1 ♜xb2 7. ♜f7+, or 6. ♜f7+ ♙xf7 7. ♖xf7+. In fact, in the latter line White can probably put his faith in his superb bishop and extra pawns, and try for more. In that event the pressure on b2 can be relieved by the queen exchanging herself, or by her giving check on f4 and dropping back to c1.

The real fight starts after 1. ♜xf7+!! ♙xf7 2. ♖e5+ (but not 2. ♖xh8 ♜b5 with a win for Black, e.g. 3. ♜a1 ♜xb2 4. ♙d5 ♙×d5 5. ♖xg7+ ♙f7). Now Black has several possibilities. We shall consider each of them in turn.

The most threatening looks to be the blocking 2... ♖e6 with the idea of giving mate after 3. ♖c7+ ♜e8 4. ♖×a5 ♖a2#. Which is why White does not take the rook but looks for perpetual check: 2... ♖e6 3. ♖c7+ ♜e8 (3... ♖d7 4. ♖×a5 with advantage to White since mate is no longer threatened; likewise after 3... ♜f8 4. ♖d8+ ♖e8 5. ♖×a5 White maintains the advantage.) 4. ♖b8+ ♜d7 5. ♖xb7+ (Black pushed the queen off the important d8-a5 diagonal, but his king in the center is constantly exposed to checks.) 5... ♜d8 6. ♖b8+ ♖c8 (White forced Black into a partial withdrawal of his forces. If 6... ♜e7 then 7. ♖c7+ ♜e8 8. ♙c6+, or 7... ♖d7 8. ♖×a5 both winning; or 6... ♜d7 7. ♖b7+ with a repetition of position.) 7. ♖d6+ ♖d7 (But not 7... ♜e8?? because of 8. ♙c6+ and White wins straight away.) 8. ♖b8+ ♜e7 (8... ♖c8 9. ♖d6+ drawing.) 9. ♖xh8 ♖e6 (Otherwise White will play 10. ♖xg7 and 11. ♖f6+.) 10. c4 d×c3 11. ♜×c3 ♖a2+ 12. ♜c1 ♖a1+ 13. ♜d2 ♖xb2+ 14. ♜c2 ♖e5 15. ♖c8 ♖xg5+ 16. e3 ♖e5 or 16... ♜b5, but by now White has no difficulty in defending his king, and the position guarantees a draw. So perhaps in the 2... ♖e6 varia-

tion Black should take a draw in the form of 3.♖c7+ ♕e8 4.♗b8+ ♕e7 5.♖c7+ ♕e8, or 4...♗d7 5.♗xb7+ ♗d8 6.♗b8+ ♖c8 7.♗d6+ ♗d7 8.♗b8+ ♗c8.

Following 2.♗e5+ Black could also try moving his king away. After 2...♗f8 3.♗b8+ ♜e8 4.♞f1+ (4.♗f4+!?) ♕e7 5.♗e5+ ♗d8 (5...♗e6 6.♖c7+ ♜d7 7.♗xa5 with advantage to White; 5...♗d7 6.♗xg7+ ♗d8 7.♗xh8 (7.♞f6! ♗c7 8. ♗xh8 is even stronger.) 7...♞b5 8.♗f6+ ♗xf6 9.gxf6 also with advantage to White.) 6.♗xg7 ♞b5 7.♗xh8 (7.♞c1!?) ♞xb2+ 8.♗a1 ♞xc2 and yet here, in the distant endgame, White may have problems in connection with the uncertain position of his king. So after 2.♗e5+ ♗f8 it is simplest to play 3.♞f1 with numerous threats. Here are some examples:



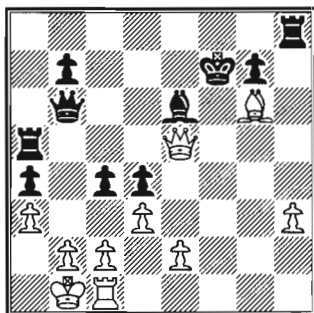
Position after 3.♞f1 (analysis).

- a) 3...♞b5 4.♜d5 ♞xb2+ 5.♗a1 with a won game for White;
- b) 3...c4 4.♜d5 ♞xd5 5.♗xd5 ♖c7 6.dxc4 ♕e8 (6...♗g8 7.♞xf7! ♗xf7 8.♗d8+ ♗f8 9.♗d5+ ♗f7 10.♗d8+ with perpetual check.) 7.♗e4+ ♗d8 8.♗xd4+ and Black cannot free himself, he has to return, 8...♕e8.
- c) 3...c4 4.♜d5 ♞xd5 5.♗xd5 ♖c7 6.dxc4 g6 7.♗xd4 ♞g8 (7...♗g8 8.♞xf7+! (8.♞d1!? intending 9.♗f6) 8...♗xf7 9.♗d8+ ♗f8 10.♗d5+ ♗g7 11.♗d7+! ♗f7 12.♗d4+ and again a draw by perpetual check).

There is another attempt by Black to play for a win: 2...♗d8 3.♗b8+ ♗d7 (3...♗e7 4.♗e5+ repeats the position.) 4.♜f5+ ♕e7 (4...♜e6 5.♜xe6+ ♕xe6 6.♗xh8 with advantage to White; 4...♗c6 5.♗xh8 ♞b5 6.♖c8+ ♗d6 7.♗d7+ ♕e5 8.♗xf7 and White wins.) 5.♗e5+! (5.♗xh8?? ♞b5) 5...♗f8 (5...♜e6 6.♜xe6 ♗xe6 7.♗xg7+ and 8.♗xh8 with advantage to White; 5...♗d8 6.♗b8+ with a repetition of position.) 6.♗b8+ ♜e8 (6...♗e7 7.♗e5+ and a repetition of position.) 7.♞f1!! ♞b5 (7...♗e7! 8.♗e5+ ♗d8 9.♗xg7 ♞b5 unclear.) 8.♜d7+! ♕e7 ♜xb5 wins.

This is why, precisely because of 1.♖xf7+!!, the initial position can be assessed as equal. Consequently 1.♖xf7+!!, as the strongest move, can be assigned the letter “a” in the formula of successive solving propositions. (Do not worry about the details of this for the moment. We will see the formula in use later on.)

Weaker than 1.♖xf7+!! is the move 1.♖e5, though even then a very hard-fought battle ensues. The move 1.♖e5 contains a very cunning trap. Upon the obtrusive 1...♖b5? there would follow 2.♙d5! and White would seize the initiative: 2...♖b2+ 3.♖a1 – Black already has lots of problems now since 4.♖b1 ♖xb1 5.♖xb1 and the further 6.♖xb7+ is threatened, or the prosaic 4.♙xe6 fxe6 5.♖xg7+, with a won game for White in both cases. Therefore Black has to reply to 1.♖e5 with 1...c4!. Now White is left with just the familiar sacrifice 2.♖xf7+ ♖xf7. In the game quoted above, play continued 3.g6? and after 3...♖e8? the white pawn became very menacing. It was necessary, therefore, to reply confidently 3...hxg6! 4.♙xg6 (4.♖f1+ ♙f5 wins). Black now has two principal possibilities. White draws in a subtle way after 4...♖xg6?, but loses after the correct reply 4...♖e7! Here are the analyses of these two possibilities:



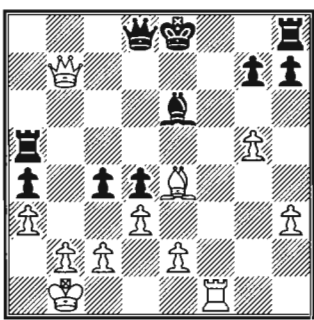
Position after 4.♙xg6+ (analysis).

- a) 4...♖xg6 5.♙g1+ ♖f7 6.♖xg7+ (6.♖xg7+? ♖e8 7.♖f6 ♖d6! and Black wins.) 6...♖e8 7.♖xh8+ ♖e7 8.♖h4+ (The only move! If 8.♖g7+ then 8...♙f7.) 8...♙d6 9.♖f4+ ♖e5 10.♖g5! ♖c5 11.dxc4! ♙xc4 (Otherwise Black is placed in *Zugzwang*, and the white h-pawn can march even further.) 12.♖f8+ ♖c6 13.♖f6+ with a won game for White. Equally 8...♖d7 does not help Black to find the way to a win, because White can immediately swoop onto the seventh rank with numerous threats, e.g. 8...♖d7 9.♖g7+ (Better may be 9.dxc4! with ideas of e3, ♖d1, or ♖g4.) 9...♖c8 10.♖f6 c3 (Black can hide by 10...♖b8-a7, which makes the whole 9.♖g7+ ♖c8 10.♖f6 line debatable.) 11.♖g8+! ♖c7 12.♖e7+ ♙d7 13.♖d8+ ♖c6 14.♖g6+ with

a won game for White; or 11...♔d7 12.♖g7+ ♔d6 13.♗e6+ (Even stronger is 13.♗e7+ ♔e5 14.♖g5+ ♔f4 15.♗f6+ ♖f5 16.♖xf5+ when Black loses his queen or is mated.) 13...♔e6 14.♖g6+ and 15.♖xb6. Therefore, Black must play for a draw here right away: 11...♔d7 12.♖g7+ ♔c8 13.♖g8+. Likewise 8.♗h4+ ♔d6 9.♗f4+ ♔c6, instead of 9...♖e5, loses after 10.♖g6, while White harbors numerous threats in the variation 9...♔d7 10.♖g7+ ♔c8 11.♗f8+ ♔d8 12.♗b4!

b) 4...♔e7 5.♗xg7+ ♔d6 6.♗xh8 c3 7.♗b8+ ♔e7 8.♗e8+ with perpetual check. But Black could strengthen his play: 7...♔d7 8.♗e8+ (8.♖e8+ ♔e7 with a win for Black.) 8...♔c7 9.♗e7+ ♔b8 10.♗f8+ ♖c8! 11.♗b4 ♖b5 12.♗xa4 ♖xb2+ 13.♔a1 ♖a2+ 14.♔xa2 ♗b2#.

The hanging bishop on g6, the weak b2-square – those are the reasons for concluding that Black is winning after 1.♗e5 c4 2.♖xf7+ ♔xf7 3.g6+ hxg6 4.♖xg6+ ♔e7!. So White must continue the attack by 3.♖f1+ ♔e8 4.♗b8+ (4.♗xg7 ♖g8 5.♗xh7 c3 with a won game for Black.) 4...♔d8 (After 4...♔d7 the rook could now be captured: 5.♗xh8 c3 6.♗xg7+ ♔d6 7.♗f8+ ♔c7 8.♗e7+ ♔b8 9.♖f8+ ♔a7 10.♗b4 ♗xh4 11.axb4 ♖xg5 12.♖f1 ♖xh3 13.♖h1 with equal play.) 5.♗xb7.



Position after 5.♗xb7 (analysis).

Black has a rook more and only two pawns less; but his forces, scattered over the entire chessboard, are not suitably coordinated. Thanks to this White can, despite everything, maintain the pressure even though he is playing with a rook less!

Now, for example, 5...♖f8? loses to 6.♖c6+ ♖d7 7.♖xd7+ ♗xd7 8.♖xf8+. Yet 6.♖c6+ ♖d7 7.♖f4! is threatened, and against the danger of 8.♖e4! neither 7...♖e5 (because of 8.♖xd7+ ♗xd7 9.♗b8+ ♗d8 10.♗xe5+ winning), nor 7...♖xc6 8.♗f7# saves Black.

No help either is 5...c3 6.♙c6+ ♘d7 7.♙f4 and further as in the variations just quoted.

After 5...cxd3 6.♙c6+ ♘d7 7.exd3 ♙xc6? 8.♙f7#.

Black can still try 5...♙xg5, but after 6.♙c6+ ♘d7 7.♙f4! White's attack again develops with enormous strength.

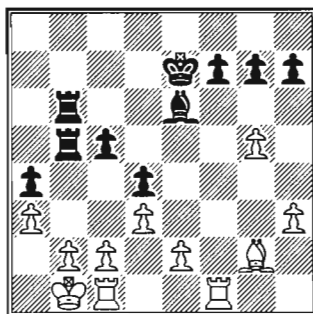
Worth considering is 5...♙c5 with the idea of returning material after 5.♙c6+ ♙xc6 7.♙xc6+ ♖e7 8.♙xa4 or 8.dxc4 or, best of all, 8.♙f4. However, White now has three pawns for the piece, which is sufficient compensation in this position.

The best defense for Black is connected with the moves 5...♙c8 or 5...♙d6. Now the fight is in full flow, but it is Black who dictates the terms in many lines, e.g. after 5...♙c8:

- a) 6.♙xg7 ♙g8 7.♙xd4 (7.♙xh7 ♙axg5 with advantage to Black.) 7...♙axg5 8.♙xh7 ♙8g7 with a plus for Black. However, after 8.♙d6! White is not worse. He can continue 9.♙c6+ ♘d7 10.♙d5, or take a draw by 10.♙xd7+;
- b) 6.♙xg7 ♙g8 7.♙xd4 ♙c5!? 8.♙f6 ♙e7 9.♙c3 ♙axg5 intending ...♙g1 with the advantage;
- c) 6.♙c6+ ♖d8 7.♙b4 ♙xg5 8.♙d6+ ♘d7 9.♙xd7 ♙xd7 10.♙b8+ ♙c8 11.♙d6+ ♖e8 12.♙f4 with equality;
- d) 6.♙c6+ ♖d8 7.♙xg7 ♙g8 8.♙xd4+ ♖c7 9.♙f6 ♙axg5 10.♙g2 ♙d7! and Black preserves the advantage; but 10.♙xa4 is an improvement!

On the basis of the analyses above, the move 1.♙e5 can be assigned the letter "b" in the formula of successive solving propositions. Although it is weaker than 1.♙xf7+!!, when White has problems in obtaining the draw, it does lead to exciting play. At the same time, Black preserves better chances through precise defense.

Weaker than 1.♙f7+!! or 1.♙e5 is the move 1.♙xb7+. After 1...♙xb7 2.♙xb7 ♙b8 3.♙c6 ♙b6 4.♙g2 ♙ab5 Black not only recovers a pawn but also obtains an even more dangerous initiative, for instance:



Position after 4...Bab5 (analysis).

- 5.b3 axb3 6.c4 dxc3 7.Bxc3 b2 8.a4 Qa2+ 9.Qxa2 b1=Q+ 10.Bxb1 Bxb1 11.Bxc5 B6b2+ 12.Qa3 Bb3+ 13.Qa2 B1b2+ 14.Qa1 Bxe2 with advantage to Black;
- 5.b3 axb3 6.c4 dxc3 7.Bxc3 b2 8.d4 cxd4 9.Bcf3 Bxg5 with advantage to Black;
- 5.b3 axb3 6.cxb3 Bxb3+ (6...Qxb3 may be stronger) 7.Qc2 Bxa3 with advantage to Black;
- 5.Bce1 Bxb2+ 6.Qc1 Ba2 7.Qd2 Bbb2 8.Bc1 Qb3! with advantage to Black again.

The move 1.Qxb7 can be assigned the next letter, “c.”

After 1.Qxh8 White simply gets mated. 1...Bb5 and now:

- 2.Bcd1 Bxb2+ 3.Qc1 Bb1+ 4.Qd2 Qa5+ 5.c3 Qxc3#;
- 2.b4 Bxb4+ 3.axb4 Qxb4+ 4.Qa1 Qa3+ 5.Qb1 Qa2#;
- 2.b3 Bxb3+ 3.cxb3 Qxb3+ 4.Qa1 Qa2#;
- 2.c4 Bxb2+ 3.Qa1 Qb3 and ...Qa2# follows inevitably.

Similar mates come after 1.Qf4 or 1.Qg3. Of the three moves – 1.Qxh8, 1.Qf4, and 1.Qg3 – the first is best inasmuch as White at least takes a rook. This could be significant in actual play in case Black did not see the rook sacrifice after 1.Qxh8 Bb5 2.b3 and played 2...axb3 (as occurred to some tested players during analysis). Then 3.c4! dxc3 4.Qxg7 saves the day. Thus 1.Qxh8 at least requires Black to find the only path to a win. The other two moves (1.Qf4 and 1.Qg3) leave Black with greater freedom in continuing the attack and can be regarded as inferior to 1.Qxh8 on practical grounds.

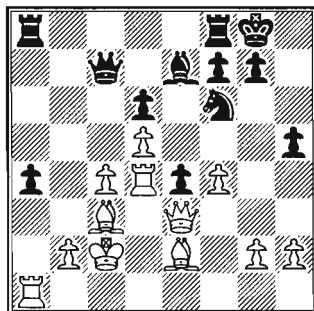
In principle there is no great difference between the moves 1. ♖f4 and 1. ♖g3. In the given position both are very weak and lead to defeat after 1... ♜b5. The only superiority of the first move – once more, from a practical viewpoint – rests on Black encouraging White here to take the undefended pawn on h3. Then after 1... ♘xh3?? 2. ♖xf7+ the game's picture undergoes a radical change in White's favor. Of course such a "trap" is too transparent; however, the move 1. ♖g3 contributes absolutely nothing to defense.

On the basis of the analysis quoted above, we can establish the hierarchy of moves:

- a = ♜xf7+
- b = ♖e5
- c = ♖xb7+
- d = ♖xh8
- e = ♖f4
- f = ♖g3

where $a > b > c > d > e > f$ (in other words "a" is better than "b," "b" is better than "c," etc.).

POSITION #2



The position is very sharp, as neither king can feel secure. The white king is more exposed to attack, but the bishop-pair constitutes a hard-to-penetrate shelter. The bishops control important squares around the white king. On the other hand, the advanced h5-pawn creates the opportunity for White to open the g-file or h-file, which could turn out to be decisive in an attack on the black monarch.

In turn, Black threatens the maneuvers ...♖fb8, ...♖b3, ...♗b7 and ...a3, smashing the position around the white king, or possibly ...♖fb8, ...♗d7, ...a3 when b2-b3 cannot be played now because of mate: ...♖xb3, ...♗a4+, ...♗c2+. Dangerous, too, could be the pawn sacrifice ...♗d7 and ...♗f6. This is probably the best option for Black. He thereby gives away the e4-pawn, but in exchange swaps off an important defender – the bishop on c3.

In this position in the game Konstantinopolsky–Aronin, Moscow 1950, White unsoundly sacrificed material. 1.♖xe4? ♗xe4 2.♗xe4 ♗d7!. And it turned out that after this important defensive move Black can counterattack. The main idea involves the exchange of dark-squared bishops. 3.♗xh5 ♖fe8 4.♗d3 ♗f6! 5.♗xf6 gxf6 6.♖a3 ♗a7! 7.♗d2 ♗f8 8.♗g4 ♗c5 9.♗e2 (9.♖c3 a3!) 9...♗g1 10.♗d3 ♗xh2 11.♗f2 ♗h1 12.♗f1 ♗h7+ 13.f5? (13.♗d3!? ♗h1 14.♗f1) 13...♖e5 14.g4 ♖ae8 15.♖h3? ♗xh3 0-1.

Since both kings find themselves in jeopardy, White ought to hasten with offensive action. If White starts action on the kingside straight away, Black's counterattack will be late. An immediate 1.g4! is in that light the optimum solution. Concrete variations confirm this:

- a) 1.g4 hxg4 2.h3 ♖fb8 3.hxg4 a3 4.b4 ♗d7 5.g5 ♗a4+ 6.♗d2 ♗d7 7.♖e4 with a winning advantage for White since after the withdrawal of the bishop 8.♗h3 is threatened, attacking the knight with tempo, and a further 9.♖h1 with the threat of mate on h8;
- b) 1.g4 hxg4 2.h3 gxh3? 3.♗xh3 intending ♖h1 and ♗h8#;
- c) 1.g4 hxg4 2.h3 ♗d7 (this position can also be obtained by transposition of moves: 1.h3 ♗d7 2.g4 hxg4) 3.hxg4 ♗xg4 4.♗xg4! ♗xg4 5.♖g1 ♗f5 6.♗xe4! (6.♖xe4? ♗f6 7.♗xf6 ♗xf6 with a black counterattack along the b-file) and now Black is no longer able to repulse the threats to g7 and e7;
- d) 1.g4 ♖fb8 2.g5 ♗d7 3.♖xe4 ♗f8 4.f5 with the idea of ♖h4 and threats along the h-file. White, at what he considers a critical moment, could even evacuate the king to the kingside;
- e) 1.g4 hxg4 2.h3 ♗d7 3.hxg4 with advantage to White. One exciting possibility is 3...♗f6 4.♖xe4 ♗c5? 5.♖h1! ♗xc3 6.♗h3 f5 7.g5! g6 8.♗xc3 winning.

Slightly slower than an attack on the king by 1.g4 is 1.h3, which can be seen for instance in a comparison of two variations: 1.g4 ♖fb8 2.g5

♖d7 3.♙e4, and 1.h3 ♜f8 2.g4 ♜b3 3.g5 ♖d7. In the second case Black has gained a tempo, and it is not apparent that the move h2-h3 was useful to White: 4.♙e4 ♜f8 5.♙e8 ♜a7 6.♞e7 (6.♜xh5! threatens ♜xf7+, and 6...g6 would fatally open the long black diagonal.) 6...♞b7 7.♜xh5 g6 8.♜xg6 ♜xc3+! (This is where the extra tempo comes into play.) 9.bxc3 ♞b3+ 10.♞d2 fxg6 and Black has at least a draw. For this reason White ought to play 5.f5 or 5.♜xh5, with the advantage.

On the basis of the analyses above it can be acknowledged that the immediate 1.g4 is slightly better than the preparatory 1.h3, though in both cases White can preserve the advantage.

Therefore, we shall classify the move 1.g4 as the letter “a” in the formula of successive solving propositions, and the move 1.h3 as the letter “b.”

Both moves, 1.h3 and 1.g4, immediately engage in a fight on the kingside (1.h3 only in connection with 2.g4), where they can be counted to bring an advantage. 1.♙a3 also looks logical enough, safeguarding White from the ♜f8-b8-b3 maneuver or the blow a4-a3. Since one should count on a black attack on the queenside, 1.♙a3 could prove to be a useful defensive move. Its drawback is that thereby White does not yet commence hostilities on the kingside, and sometimes the rook could be useful in the attack on that wing. The move 1.♙a3 we shall classify as the letter “c” in the formula of successive solving propositions.

The next letter, “d,” we shall assign to the move 1.♜dd1. White plans to transfer the rook from d1 to an attack on the king, whereas the other rook, if required, oversees the a4-a3 break-through. The sense of the move ♜dd1 is most evident in the variation 1.♜dd1 ♜f8 2.h3 ♞d7 3.g4 hxg4 4.hxg4 ♖xg4 5.♜xg4 ♞xg4 6.♜g1 and Black loses immediately.

After 1.♜dd1, of course not dangerous is 2.♜xf6 ♜xf6 3.♞e4 in which for a pawn Black obtains sufficient compensation in the form of pressure along the b-file and the a1-h8 diagonal. The move 1.♜dd1 has the drawback that on occasion the rook would come in useful by taking the e4-pawn with tempo against the e7-bishop (compare the variations with 1.g4). However, like the prophylactic 1.♙a3, the move 1.♜dd1 does not relinquish White’s advantage. The two moves, 1.♙a3 and 1.♜dd1, can be acknowledged as equals, c = d.

The next moves have less merit than those mentioned earlier. We shall consider them in turn.

The move 1. ♖h3 in principle counteracts the possibility of 1... ♗d7 (its main ideas: control of g4, transfer of the queen to a4 after a4-a3). The likely endgame would be hopeless for Black, with weaknesses on a4 and e4, in addition facing a bishop-pair on White's side. 1. ♖h3 does not pose a threat of 2. ♕xh5 since Black then obtains counterplay after 2... ♖xh5 3. ♖xh5 ♕f6 (or 3...f5 and only then ...♕f6).

The move 1. ♖g3 not only fails, after 1...h4, to further White's attack, but also necessitates another queen move. After 2. ♖xh4 ♖xd5! Black decidedly takes the initiative. And if 2. ♖g5 then 2... ♖e8! (similarly 2... ♖h7!), with the idea of 3... ♕f6, and the exchange of dark-squared bishops suits Black, who is attacking b2. Another plus for Black is the advance of his h-pawn – it is now no longer attacked by the bishop.

The move 1.f5 not only does not threaten 2. ♖g5 (on account of 2... ♖xd5), but also gives Black an important tempo after 1... ♗d7. Black attacks the f5-pawn and his queen is better placed on the a4-e8 diagonal whence it threatens a shift to a4, e.g., 1.f5 ♗d7 2. ♖f4 ♖fb8 3.h3 ♖b3 4.g4 a3. One possibility is 5.g5 ♖a4, when if White takes the knight it is mate in two, or if 6. ♖d2 ♖xc3!, and if 6. ♖c1 ♖xd5!.

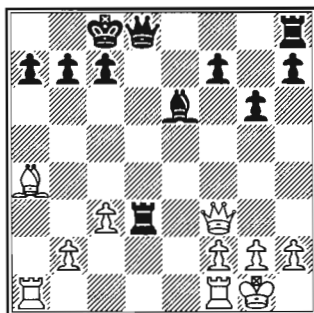
Such moves as 1.g3 and 1. ♕b4, which contribute nothing substantial to White's position, can also be acknowledged as losses of tempo, though it is true that they cause little harm either.

On the basis of the above analyses, for Position #2 we can establish the following hierarchy of moves in the formula of successive solving propositions:

- a = g4
- b = h3
- c = ♖a3
- d = ♖dd1
- e = ♖h3
- f = ♖g3
- g = f5
- h = g3
- i = ♕b4
- j = ♕d1
- k = ♖xe4

where a>b>c = d>e = f = g = h = i = j>k.

POSITION #3



White has a pawn less, so he must think about finding compensation for it. He should pin his hopes on an attack against Black's king. In the game Chernishev–Ostrivoj, Stavropol, 1967 (colors reversed for the benefit of the analysis below) there followed the stunning **1. ♕d7+**, and after **1... ♖b8 2. ♗×d3** Black lost. Likewise after **1... ♕×d7 2. ♗×d3** or **2. ♖×a7** with decisive threats; also after **1... ♖×d7 2. ♗×d3+** White wins without difficulty. Weak also is **1... ♖×d7** after which comes **2. ♖×a7** and Black cannot simultaneously repel three threats: **3. ♖a8#**, **3. ♗×b7#**, and **3. ♖a8+** winning the queen. The idea behind the sacrifice, which Grandmaster Alexander Kotov considered to be one of the most brilliant he had ever seen, lies in the variation **1... ♗×d7! 2. ♖×a7 ♖b5 3. ♖d1 ♖b8 4. ♖da1! ♖c8 5. ♖d1** and a draw by repetition of moves.

Black is not rescued by **2...c6**, due to **3. ♖a8+ ♖c7 4. ♗f4+ ♗d6 5. ♗×d6+ ♖×d6 6. ♖×h8** with advantage to White; no help either is **2...♖d8** since there would follow **3. ♗f6+** and **4. ♗×h8+**. Of course the queen could not be taken: **2...♖×f3 3. ♖a8#**.

These very analyses were given by Kotov who considered the position to be equal. However, **1. ♕d7+?! ♗×d7! 2. ♖×a7 ♗d6!**, in place of **2...♗b5?**, leads to a win for Black! Here are some examples.

- a) **3. ♖a8+ ♖d7 4. ♖×h8 ♖×f3;**
- b) **3. ♗f6 ♖e8! (3...♖d8?? 4. ♖a8+ ♖d7 5. ♖×d8+)** **4. ♖a8+ ♖d7 5. ♖×e8 ♖×e8;**
- c) **3. ♗×b7+ ♖d7 4. ♗b5+ ♖e7 5. ♖×c7+ ♗×c7 6. ♗×d3 ♖d8** with a win for Black.

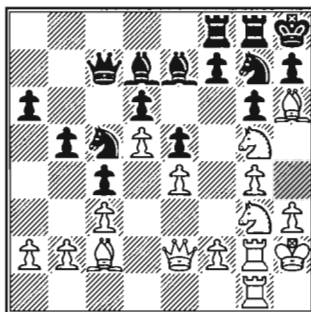
Therefore, the piece sacrifice is unsound and leads to a Black victory. In the initial position, one of three equivalent queen retreats must be chosen.

Here is the hierarchy of moves in the formula of successive solving propositions:

a = ♖f4
 b = ♖e2
 c = ♖e4
 d = ♕d7+
 e = ♖fd1
 f = ♕c6
 g = ♕b5
 h = ♖c6

where a = b = c > d > e > f = g = h.

POSITION #4



In Position #4 White has achieved great superiority on the kingside. It turns out that after acceptance of the positional piece sacrifice **1. ♖f5!!** the pressure of the white pieces cannot be repulsed. The following variations illustrate this:

- a) **1... ♕xg5 2. ♕xg5 gxf5 3. gxf5 f6** (3... ♖e8 4. ♖h5 f6 5. ♕h6!, not 5. ♖xe8 f×g5) **4. ♕h6 ♖f7 5. ♖h5 ♕e8 6. ♖g4!** (6. ♖xg7 ♖f×g7 7. ♖xg7 ♕xh5 8. ♖c7 is about equal. 6. ♖g4 was played with the threat 7. ♕xg7+ ♖f×g7 8. ♖xh7! ♖xh7 9. ♖h4+ ♕h5 10. ♖xh5*.) **6... ♖e7 7. ♖h4 ♕d7 8. ♖g3! ♖f8 9. ♕d1! ♖e7 10. ♖h4 ♖f7 11. ♕xg7+ ♖xg7 12. ♖xg7 ♖xg7 13. ♖xg7 ♖xg7 14. b4!** and in the game Chekhover–Zhukhovitsky, Leningrad, 1947, White converted his material advantage.
- b) **1... gxf5 2. gxf5 ♕f6 3. ♕xh7! ♖xh7 4. ♕xg7 ♕xg7 5. ♖xg7+ ♖xg7 6. ♖h5+ ♖g8 7. ♖xg7+ ♖xg7 8. ♖g5+ ♖h7 9. f6! ♖g8 10. ♖h5*.**
- c) However, Black also has **1... ♕f6**. Now what? The answer is that White

must still try to press home with a direct attack vaguely along the lines just mentioned. Therefore, not 2.♖e3 ♖e8!? 3.♙xf8 ♙xg5; nor 2.h4 (*intending to meet 2...♙xg5 with 3.hxg5! gx5 gx5*) since it peters out into a draw after 2...gx5 3.gxf5 ♖d8 4.♗xh7 ♖xh7 5.♞xg7+ ♞xg7 (5...♙xg7? 6.♙g5) 6.♙xg7 ♙xg7 7.♞h5+ ♙h6 8.♞g6 fxg6 9.♞xg6+ ♖h8 10.♞xh6+ ♖g8 11.♞g6+. More promising is 2.♞e3!? gx5 (2...♙xg5 3.♞xg5) 3.gxf5 ♖d8 4.♞g4! with attacking possibilities. However, 2.♞f3! (*a kind of waiting move that also incorporates the threat of 3.♗xg7 ♙xg7 4.♞xf7!*) is probably clearer. Transpositions to the game continuation above are still possible, otherwise a sample line is 2...gx5 3.gxf5 ♖d8 4.♗xh7! ♖xh7 5.♙c1! threatening 6.♞e3.

While in these types of position it is not possible to examine all the variations, the sacrifice(s) being intuitive in character, the analysis quoted above indicates that the initial positional piece offer is sound. The pressure of the white army will prove to be decisive.

In place of 1.♗f5, White could quietly play 1.h4, planning a knight retreat to h3 and forcing through f2-f4. In that case he would preserve a space advantage. However, the move 1.f4 loses a pawn, and the move 1.♗h5 a whole piece (White needs the h5-square for his own queen!).

Here is the hierarchy of moves:

- a = ♗f5
- b = h4
- c = f4
- d = ♗h5

where a>b>c>d.

3. HOW TO ANALYZE THE PROTOCOLS OF THINKING ALOUD

Quantitative analysis

Each protocol of thinking aloud contains some portion of all the moves considered by the testee. These moves constitute the so-called “analysis tree.” Even if the tester is able to specify this number within the so-called

“protocol space,” he cannot be certain that it is equal to or close to the overall number of moves actually considered. For the transient one-time consideration of a move, the method of thinking aloud is inadequate since it cannot take all such thoughts in. The tested person will not speak certain moves, even if he does actually consider them. Individual moves, as the fundamental units of the analysis tree, are too small for all of them to be successfully captured during testing. The testee is usually, despite training, unable to state *everything*. To use an analogy with the microscope, it can be said that the resolving power of the method of thinking aloud is insufficient. This causes single moves now and then to escape the attention of the tested chessplayer and the examiner. (Obviously, when the player is working by himself, he takes on the role of tester when he comes to analyze his own recorded analysis.)

However, the method’s reliability naturally increases if the tester keeps in mind a *formula of successive solving propositions* (one of the most important notions in the thought training discussed here). All the elements of a formula are single moves, but each of these is usually part of some series of further moves. The proposed solutions (or “solving propositions”) are not only singletons, but also entire variations. Each individual proposed solution can be assigned a letter of the alphabet, but that letter can indicate greater units of meaning than single moves. A letter in the formula can signify the chessplayer’s actual line of thought. For the tester, the formula of successive solving propositions will be like a compass that allows orientation toward the actual direction of the chessplayer’s thoughts.

Each proposed solution with a variation of several moves behind it is, therefore, a greater unit volumetrically. The method of thinking aloud grasps this more easily. Of course oversights can happen here too. In other words, the testee, for a few seconds, calculates some variation, yet despite that fails to verbalize it. However, such omissions in the protocol space should be far fewer, or at least will be easier to spot, since they would involve longer pauses in speech. Attention can be drawn to these pauses, and the tested person’s way of verbalizing corrected.

So, it can be assumed that the formula of successive solving propositions contains dependable data within itself. On the basis of this very formula, several quantitative parameters can be defined as to how a chessplayer solves chess problems.

The parameters given next are based mostly on de Groot's proposals. **N – the total number of successive solving propositions.** On the one hand, this number can be a reflection of the testee's chess mentality. A high value of **N** could indicate an **empirical** mentality. This type of player, when solving chess problems, prefers an approach based on processing a large amount of data, calculating and repeatedly checking a large number of variations. Whereas a relatively smaller value of **N** could be characteristic of the **theoretical** type of chessplayer, in whom thinking is not so much empirical as deductive, variationless deliberation. In the literature a similar distinction is sometimes made between "analytic" and "intuitive." However, note that these do not necessarily correspond to tactical and positional players respectively. Mikhail Tal was of course an amazing tactician who could calculate accurately when required; nevertheless, many of his sacrifices were made on intuitive grounds rather than according to precise computations.

On the other hand, the value of **N** could be a function of the position on the chessboard, where the more complicated the position, the more one is forced to calculate variations (even if one is predominantly a "theoretical" player); so the value of **N** will be higher. And the other way around: a smaller figure for **N** could correspond to a straightforward position.

To illustrate the next parameters we use a representative formula of solving propositions, given below, in which the letters signify the first moves considered; the closer the letter to the start of the alphabet, the better the move.

a-b-f-g-g-g-h-b-b-c-g-h-a-a-b-a-**a**

In the example above **N** = 16, that is the total number of letters in the sequence (excluding the last letter in bold, which signifies the decision taken).

A – the set of alternative actions (candidate moves) considered by the testee, here understood as equal to the set of alternatives in decision-making processes. In our example **A** = 6, since in the formula there appear 6 different solving propositions: a, b, c, f, g, h. Repetitions are omitted. The value of **A** can have a definite psychological content, namely it can be associated with the fluency and semantic versatility of spontaneous thought. It can be assumed that persons characterized by great fluency and versatility would consider many different solving propositions

in the process of choosing moves. It may be that fluency of thought will be more closely correlated with the value of **N**, whereas versatility more closely with the value of **A**. As in the case of **N**, the value of **A** may depend on the situation on the board and not only on the individual traits of the testee.

n – the overall total of successive changes in the solving propositions.

This value applies to all the proposals in the formula, but to be noted here is each instance of change, each new approach to the problem (including the very first letter as an instance of “change”). In the formula a-a-a-a-b-a the value of **n** comes to 3, as the first four letter a’s are treated as a single approach; while in our original example above (a-b-f-g-g-g-h-b-b-c-g-h-a-a-b-a-a), **n** = 12.

P_{max} – the number of re-examined solving propositions. This value marks out all the proposals considered more than once, in other words all the letters appearing in the formula for the second time, third time, etc. For instance, in our earlier example **P_{max}** = 10, because that is how often such solving propositions appear. (The first occurrence of a letter is not counted, but each reappearance is. So, since “a,” “b,” and “g” are each repeated thrice, while “h” is repeated just once, the total is 10.)

The psychological significance of **P_{max}** can vary. It may, for example, reflect a “functional fixation,” when the testee is unable to break through certain barriers during the process of solving the exercises, and repeatedly directs his attention towards the same moves, “going round in circles.” And when, at the same time, later letters of the alphabet are repeated – i.e. the testee analyzes qualitatively inferior moves. However, if letters from the start of the alphabet are constantly repeated, then that could be evidence of a good ability to concentrate on the problem, of the good quality of the testee’s thinking. A high value of **P_{max}** could also be evidence of difficulty in making decisions.

Note that the value can also refer to a single proposition; so in the example, **P_{max}(b)** = 3.

P_{ser} – the number of times a solving proposition is re-considered, but only in the longest single series. From the psychological point of view, this value represents the skill of concentrating on a single chosen solving proposition.

D_{max} – the maximum length of calculated variations, the measured number of white and black moves. This value reveals how far ahead the chessplayer is able to calculate variations, to what extent he is able, or wants, to foresee the unfolding events on the chessboard. The value of **D_{max}** can be a measure of an individual’s skill in imagining spatial relationships and manipulating them in his thoughts, or as with other factors it could simply reflect the situation on the chessboard.

T – the time to solve the exercise. On one hand, this can reflect the tested individual’s superior speed of solving problems, and can vary according to cognitive style – reflective versus impulsive. On the other hand, the time to solve the exercises may simply be a function of the difficulty of the exercises.

e – the sum of rankings. Each letter in the formula of successive solving propositions can be assigned an appropriate ranking, such that the stronger the considered move, the lower the ranking it is awarded, e.g. a = 1, b = 2, c = 3, etc. (However, if two or more moves are equally strong, then of course they would receive the same ranking.) Substituting the rankings for the respective moves of our example we get:

formula: a-b-f-g-g-g-h-b-b-c-g-h-a-a-b-a-a
 ranking: 1 2 6 7 7 7 8 2 2 3 7 8 1 1 2 1

Next, adding them up, we obtain the value **e** = 65. A relatively high value (as this perhaps is) may indicate preoccupation with weak moves; but a more reliable indicator of this is “economy of thought,” because it takes into account the number of solving propositions (**N**). This is discussed further below.

4. EXAMPLE OF PROTOCOL ANALYSES

QUANTITATIVE ANALYSIS

Person taking part in the session: unidentified titled player.

Position #1

Moves considered: b = ♖e5, c = ♜b7+, d = ♜xh8.
 b>c>d

Formula of successive solving propositions:

d-d-c-d-d-d-d-d-d-d-d-d-d-d-b

(Note that, on the evidence of the protocol, the player not only failed to pick the strongest move, $a = \mathbb{E} \times f7+$, he did not even consider it.)

N = 56	T = 16' 50"
A = 3	P_{max}(b) = 39
n = 6	P_{ser}(b) = 24
e = 145	D_{max} = 15

Position #2

Moves considered: $a = g4$, $b = h3$, $k = \mathbb{E} \times e4$.
 $a > b > k$

Formula of successive solving propositions:

k-k-k-k-k-k-b-b-b-a

N = 28	T = 7' 10"
A = 3	P_{max}(a) = 19
n = 3	P_{ser}(a) = 19
e = 52	D_{max} = 9

Position #3

Moves considered: $a = \mathbb{V}f4$, $b = \mathbb{V}e2$, $c = \mathbb{V}e4$.
 $a = b = c$

Formula of successive solving propositions:

a-c-b-a-b-c-c-c-c-c-c-c-a-b-c-c-c

N = 15	T = 6' 50"
A = 3	P_{max}(c) = 9
n = 9	P_{ser}(c) = 6
e = 15	D_{max} = 7

3. Disorganization of thinking: n/N

(The volatility or “turnover rate” of the moves considered.)

Position #1	$4/56 = 7\%$
Position #2	$3/28 = 11\%$
Position #3	$9/15 = 60\%$
Position #4	$7/38 = 18\%$

Very good results – the thinking is well organized. It was worst in Position #3, but the initial changeability a-c-b-a-b-c can perhaps be treated as consideration of the candidate moves.

4. Economy of thought: N/e

(The concentration on superior solutions ahead of inferior ones.)

Position #1	$56/145 = 39\%$
Position #2	$28/52 = 54\%$
Position #3	$15/15 = 100\%$
Position #4	$38/44 = 86\%$

These results are also generally very good. The lowish score for Position #1 simply reflects the fact that the best move did not come under scrutiny at all. The maximum score for Position #3 was achieved because just the three equally best moves were considered. (The formula of successive solving propositions for #3 was $a = b = c > d > e > f = g = h$, which gave rise to an atypical series of move rankings and, in the present case, an exceptional score for economy.)

Conclusions for further work for the person in question:

It is worthwhile practicing and, in critical positions, applying the model of phased problem solving:

- 1) The orientation phase – the phase of familiarization with the position, with the problem; initial hypothesis-generation as to what the solution might be.
- 2) The initial exploration phase – introductory calculation of variations, exploration of possible game plans;
- 3) The main, investigative phase;
- 4) The phase of finally summing up the arguments for choosing a particular move ahead of others.

More details on this phased approach are given in the next chapter (see Section 9, “Progressive Deepening” in particular).

In positions of a tactical character, in the orientation phase or in the initial exploration phase, one ought to apply the model of combination solving with regard to the following elements.

- a) What could the *motif* of (preconditions for) the combination be? – A weakness or deficiency in the opponent’s position, like a poorly defended back rank and the lack of an escape hatch for the king.
- b) What could the *theme* (outcome) of the combination be? – The desired situation after the combination has been realized, like the enemy king in a smothered mate.
- c) What resources or *means* (stratagems) could be exploited? – The devices and tactical “tricks” available, like deflection or overloading of a key defender.

You have now become acquainted with a somewhat complicated method of analyzing thinking in chess. However, do not be discouraged by possible difficulties. Remember the general learning model comprising the four levels of acquiring mastery.

Level I: Unconscious incompetence

Presumably you did not know the previously mentioned concept of studying thought by marking out the formula of successive solutions, and evaluating and analyzing parameters. You were *unaware* of it and, as a result, you were *unable* to apply it in that form.

Level II: Conscious incompetence

Now you know the method; you are *conscious* of it, but may still have problems with its application – in the harsh jargon, this is still *incompetence*.

Level III: Conscious competence

As training goes on, however, you will analyze your thinking with increasing skill. The structure and progress of your own approach to solving a particular problem will be very familiar to you during solving. You will be *conscious* of all the parameters at each moment, whenever you

wish. And you will do this *competently*.

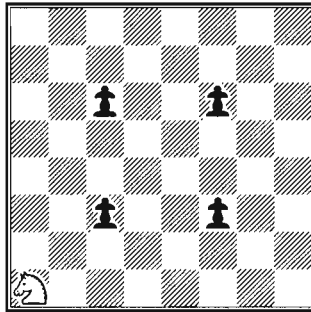
Level IV: Unconscious competence

Then there will come a time, after a series of training sessions, when you will no longer be aware of the organized, economical, focused way you are solving problems. This is the competence of a master, an *unconscious competence*. Certain processes in your mind will take place automatically and at a high, masterly level.

But to get there requires practice. Which is why on the next few pages you will find some exercises to work on.

5. EXERCISES

To begin with, a little test proposed in his day by the Czechoslovakian chessplayer Jiri Vesely.



In the shortest time, you have to make a knight's tour from a1 to h8 in sequence, but without capturing any black pawns on the way, nor ever placing the knight *en prise*, i.e. via the squares b1, c1, d1, e1, f1, g1, h1, h2, f2, c2, a2, a3, b3, d3, etc. Two attempts are made, on each occasion measuring the time taken. This test measures among other things the powers of concentration, and the skill of lengthy calculation of variations – D_{max} .

You should concentrate on the time to complete the test, and the number and type of mistakes made. (Optionally, an illegal move or putting the knight *en prise* can be punished by a ten second penalty.) A sensationally good result would be a faultless execution in about 3 minutes; strong juniors of master strength complete this test in 4 to 5 minutes at the sec-

ond attempt. The English International Masters Jonathan Penrose and Bill Hartston achieved times of 2 and 3 minutes respectively; some Grandmasters have taken significantly longer.

Now for some more conventional exercises – over seventy of them. Ideally, try to solve them out loud, recording your answers on audio tape. (*Generally* speaking, the exercises are simpler than the four training positions, and it is unlikely that you will need to spend the best part of half an hour on every single one of them. Also, the solutions we give at the end are correspondingly far less detailed.) Write down the analysis tree of the variations calculated, and then analyze your thought processes in accord with the parameters mentioned earlier.

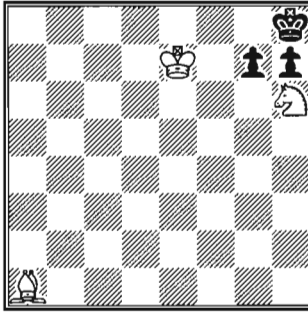
After comparing your own analysis of each exercise with the printed solution, you can perform some additional training:

1. Memorize the initial position.
2. Play through the relevant principal variations (if any) from memory.
3. In the case of a longish main line, set up the end position and compare it with the actual arrangement.
4. Once more, set up the initial position from memory.

That is how we can practice the skill of calculating future variations – D_{\max} . The exercises deal mainly with the skill of discovering difficult moves (for either side, and not necessarily on the first move). If these exercises cause you problems, you should turn your attention to widening the possible alternatives – the A value.

One last word. While mostly tactical, the positions that follow are extremely varied and in no particular order. A few are relatively very easy, but that does not mean that you are exempt from having to solve them properly. So, of course you should enjoy yourself, but remember throughout that the point of the exercises is to gain insight into your thinking, and to practice good habits.

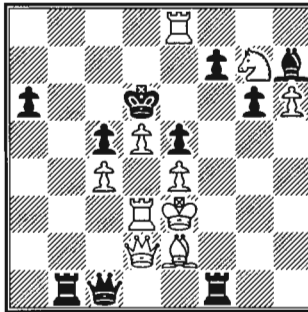
Exercise #1



(a) White to mate in three.

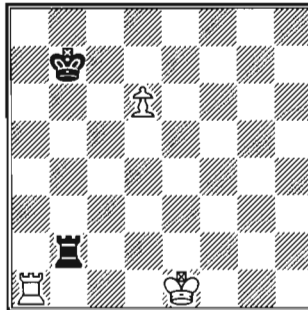
(b) With the board turned round (i.e., so that the black king is now on a1), White still to mate in three.

Exercise #2



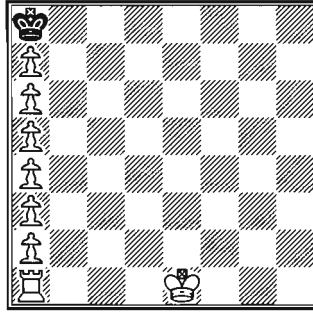
Black to move. Can he win?

Exercise #3



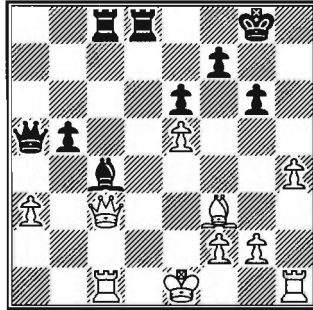
White to play and win.

Exercise #4



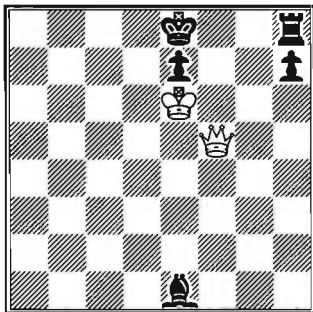
White to mate in eight moves.

Exercise #5



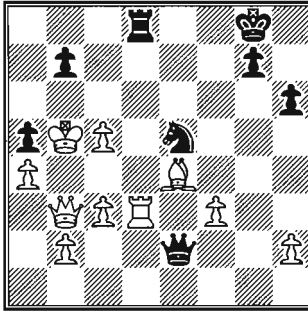
Black to play and win.

Exercise #6



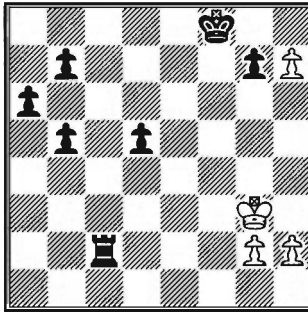
White to deliver mate in five moves.

Exercise #7



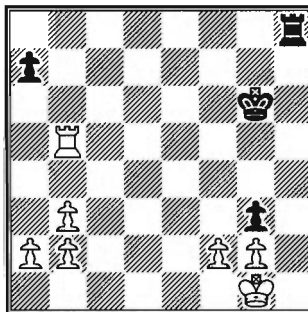
It is Black to move. What should he play?

Exercise #8



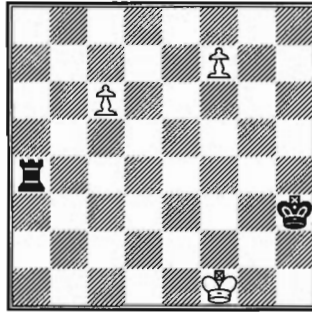
Black to play.

Exercise #9



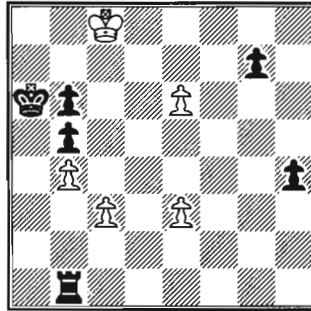
Black to move.

Exercise #10



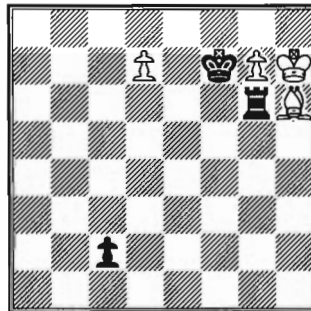
White to move.

Exercise #11



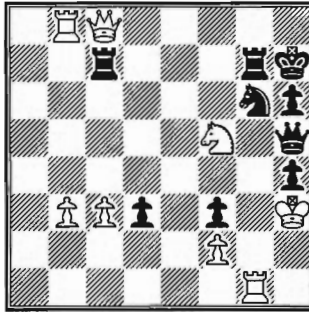
It is Black's move.

Exercise #12



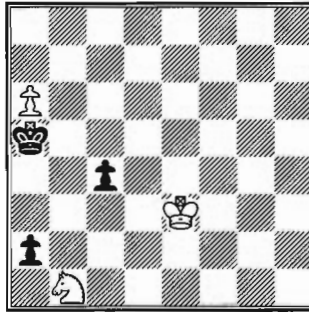
White to play.

Exercise #13



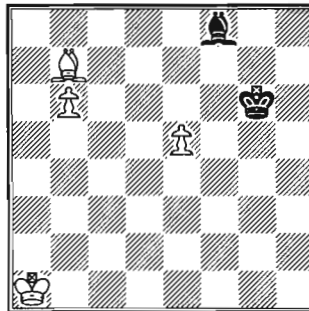
White to move.

Exercise #14



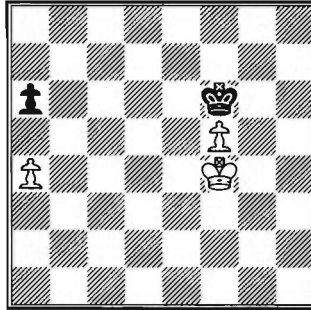
White to play.

Exercise #15



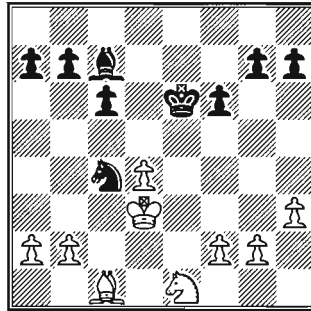
It is White's turn.

Exercise #16



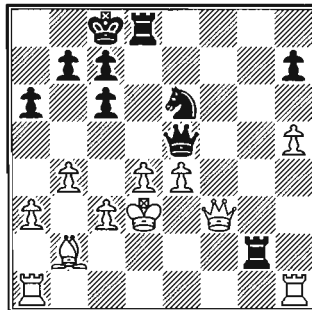
- (a) White to move, with what result?
- (b) Black to move, with what result?

Exercise #17



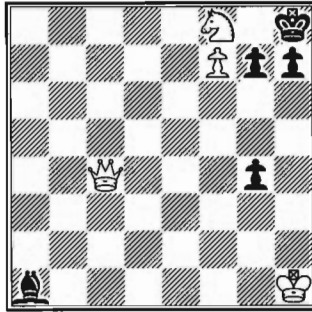
Black to play.

Exercise #18



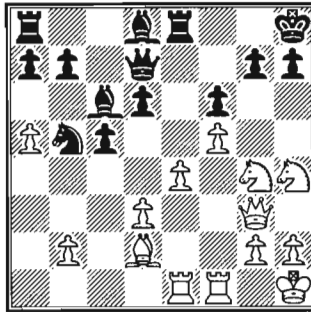
Black's move.

Exercise #19



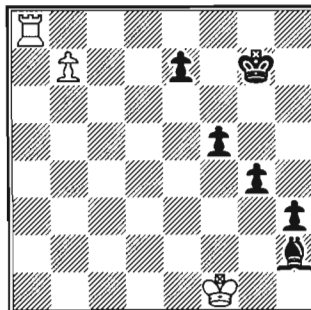
White mates in three moves.

Exercise #20



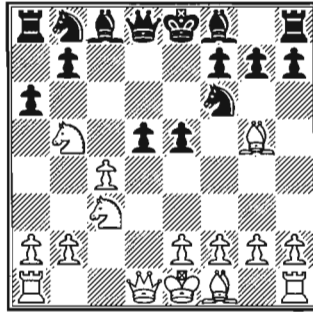
White to play.

Exercise #21



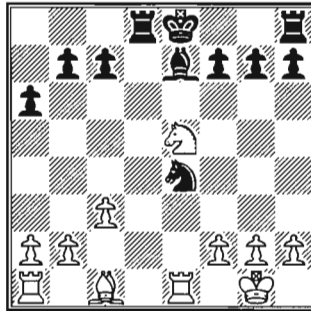
White plays 1. ♖a8-a2. How would you reply?
Write out the main variations.

Exercise #22



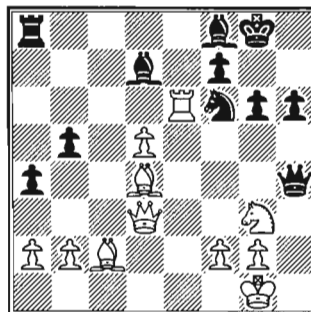
White to move. Get started, and write out the main variations.

Exercise #23



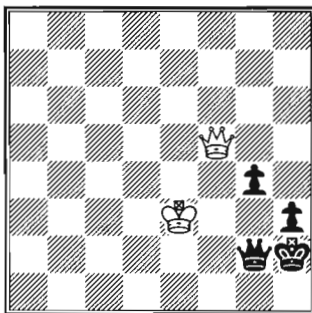
White to move. How would you play?

Exercise #24



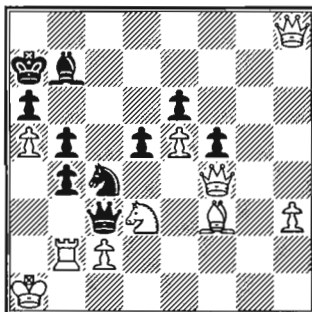
Black to play. Choose his move and justify it with variations.

Exercise #25



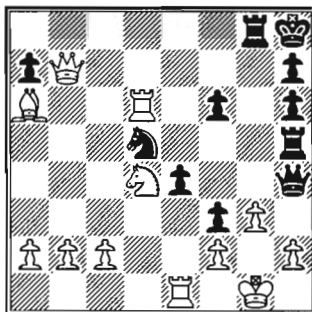
Black to move. Find a path to victory.

Exercise #26



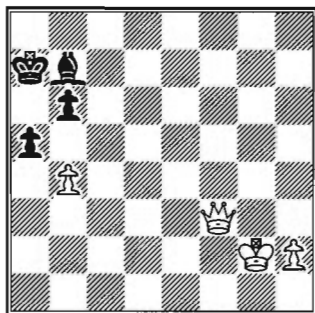
Black to play. Select the best move and offer a few optimistic variations for Black.

Exercise #27



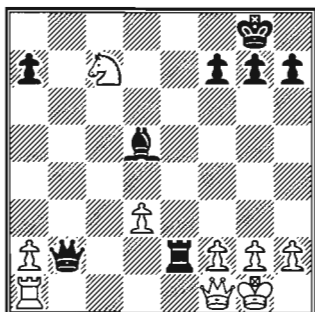
It is White's turn. Decide how to continue.

Exercise #28



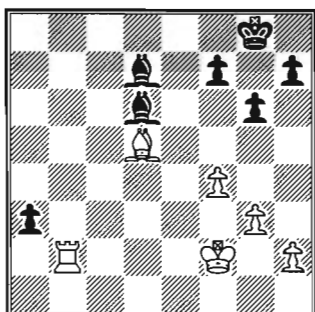
It is White to play, but who is winning? Specify the variations.

Exercise #29



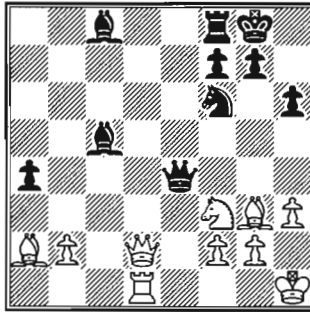
White to play. Choose a move and carry out an analysis.

Exercise #30



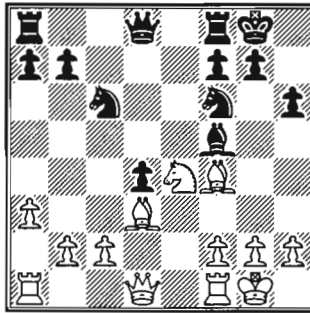
Black has just played ...a4-a3 and offered a draw. What is your reply? Acceptance of the half point, or a specific move on the chessboard? If the latter, which one?

Exercise #31



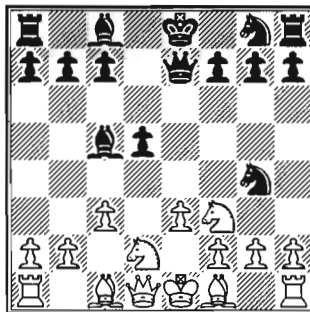
Black to move.

Exercise #32



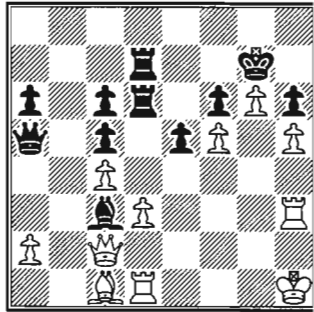
White to play.

Exercise #33



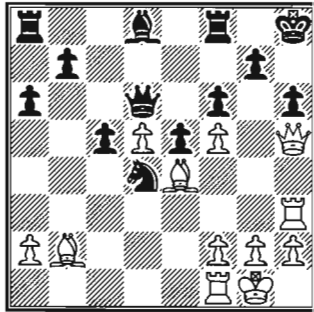
It is White's move.

Exercise #34



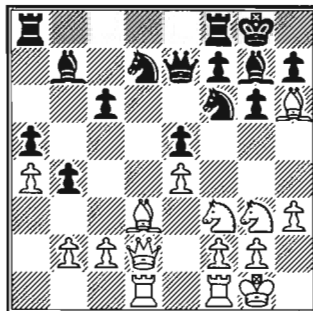
How did White continue from here?

Exercise #35



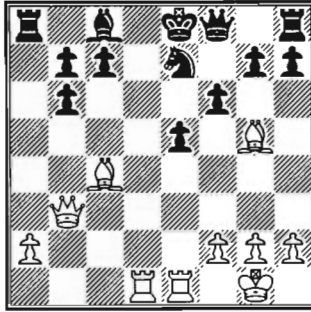
White to play.

Exercise #36



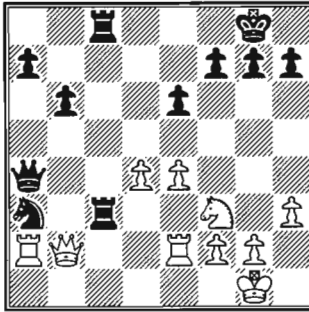
White to play.

Exercise #37



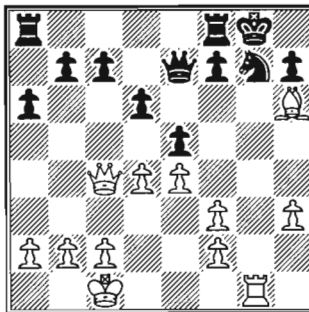
Can you find the move that Chigorin, White to move, ignored?

Exercise #38



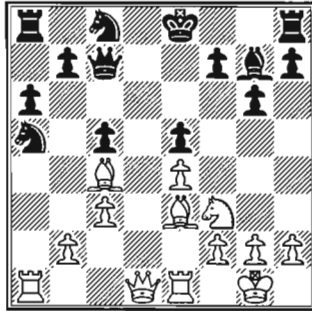
Can you find the move that Capablanca, Black to move, ignored?

Exercise #39



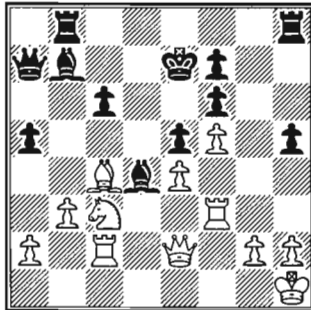
Can you find the move that Capablanca's opponent, Black to move, ignored?

Exercise #40



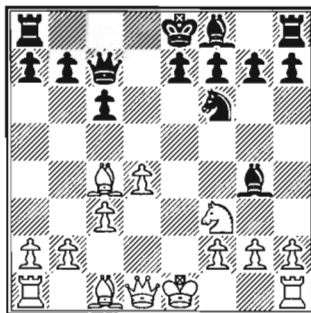
White to move.

Exercise #41



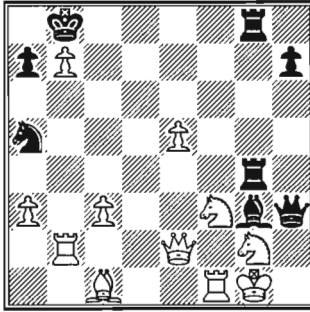
White to play.

Exercise #42



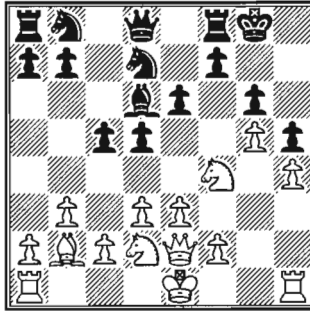
Does White have a quick win?

Exercise #43



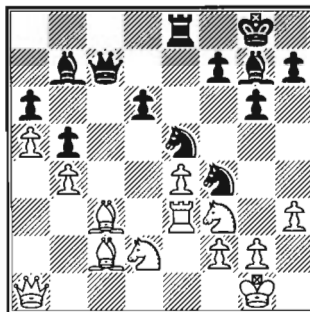
Does Black have a quick win?

Exercise #44



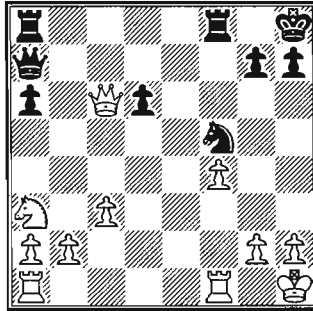
It is White's move.

Exercise #45



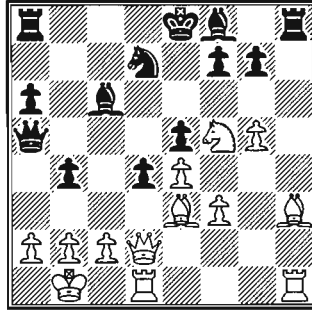
Black to play.

Exercise #46



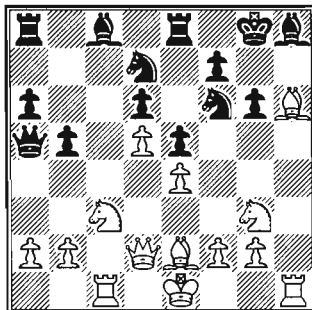
Black to play.

Exercise #47



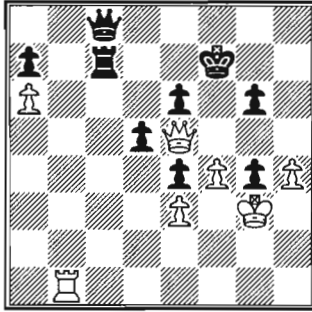
White to play.

Exercise #48



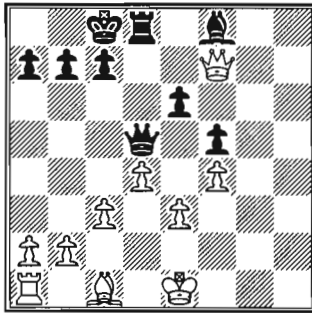
It is White to move.

Exercise #49



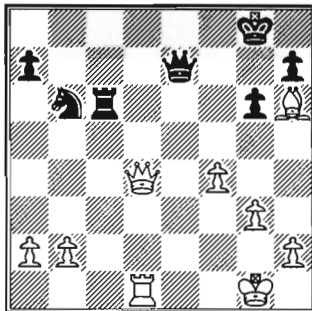
What do you think White should play in this position?

Exercise #50



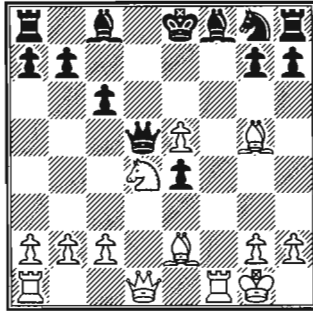
Black to play.

Exercise #51



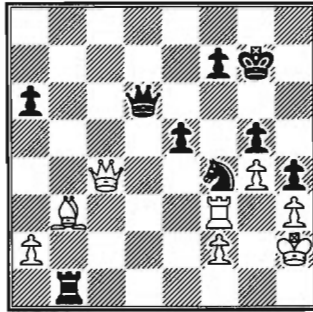
Black to move.

Exercise #52



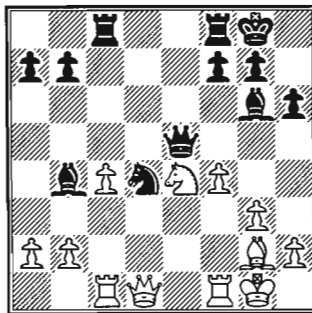
White to move.

Exercise #53



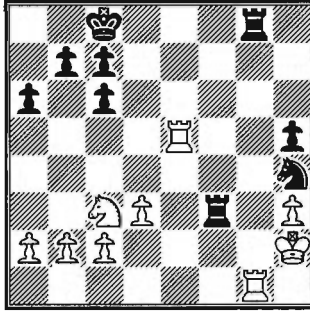
Here it is Black to move, but with what result?

Exercise #54



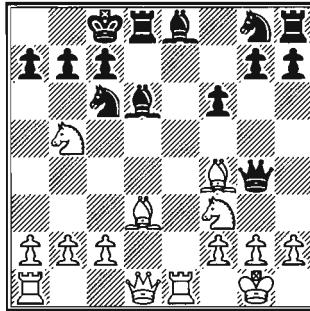
Again, it is Black to move.

Exercise #55



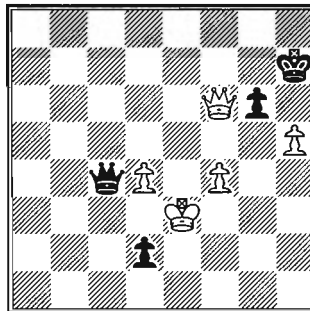
Once again, it is Black to move.

Exercise #56



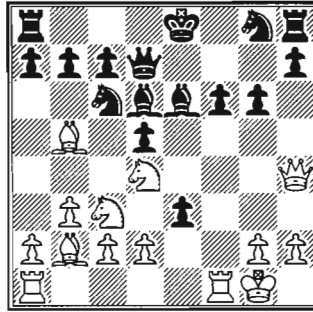
Now it is White's turn.

Exercise #57



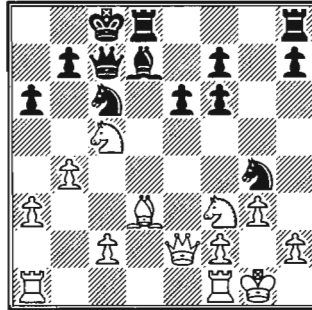
Black to move, with what result? Specify the main lines.

Exercise #58



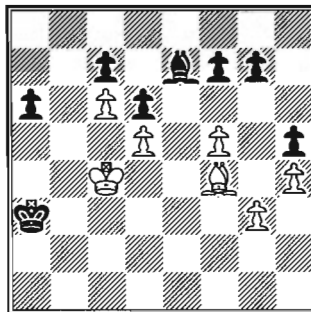
White has first move.

Exercise #59



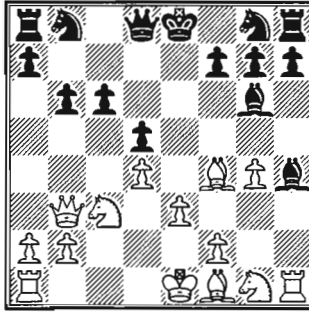
It is White to play.

Exercise #60



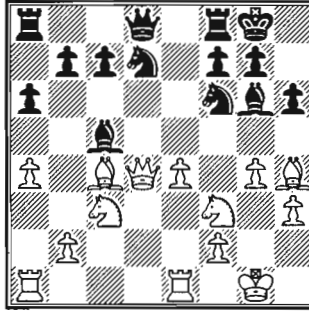
White to move, with what result?

Exercise #61



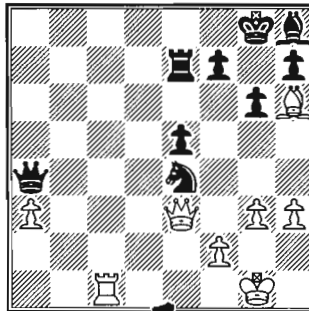
- (a) Black to move.
- (b) White to move.

Exercise #62



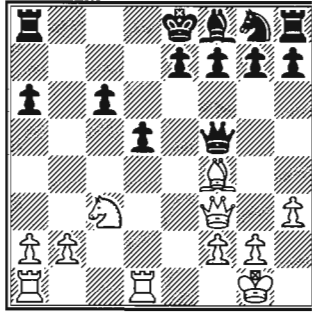
It is White to play.

Exercise #63



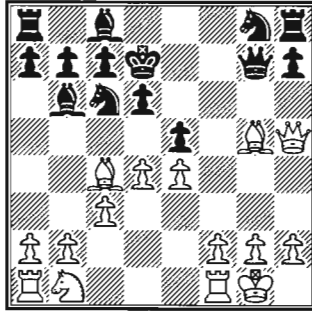
White to move.

Exercise #64



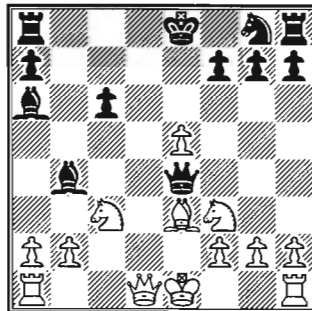
It is White to play. Support your choice with variations.

Exercise #65



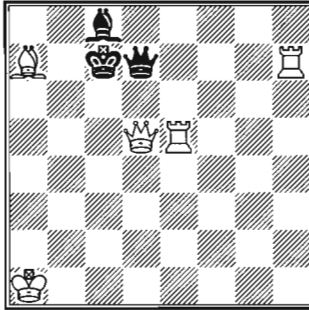
From a very, very old game. It is White to move.

Exercise #66



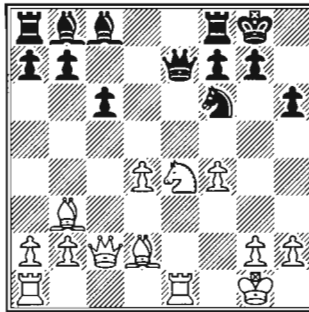
Black to play.

Exercise #67



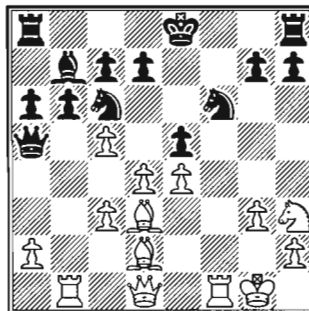
White to deliver mate of course,
but what is the least number of moves required?

Exercise #68



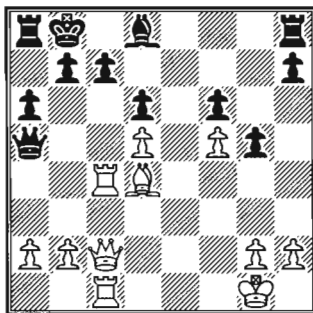
It is White to play.

Exercise #69



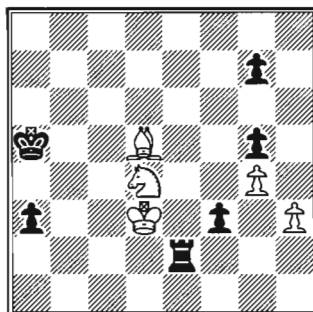
White to move.

Exercise #70



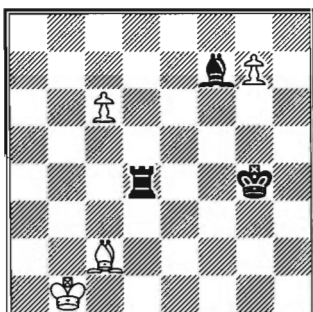
Again, it is White to move.

Exercise #71



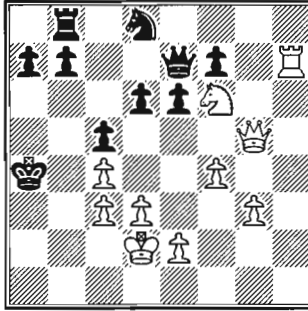
Black to play.

Exercise #72



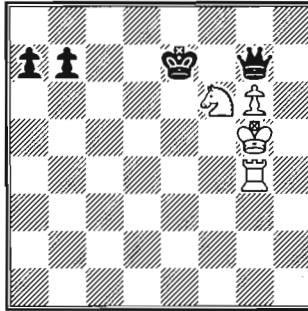
It is White to play, but with what result?

Exercise #73



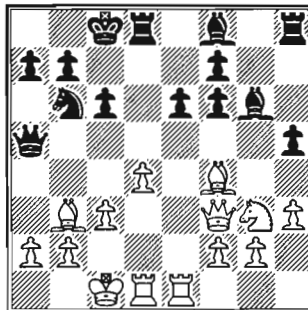
It is White's move.

Exercise #74



White to play.

Exercise #75



Finally, it is Black to play, but with what result?

6. SOLUTIONS TO THE EXERCISES

Exercise #1

Galitzky, 1900

- (a) The solution is **1. ♖f6! gxf6 2. ♜f8 f5 3. ♘f7#**.
(b) We do not know whether Galitzky intended that if Black is moving up the board there is an equally rapid mate after **1. ♝c3!**, e.g. **1...b1=♚ 2. ♘c2+ ♜xc2 3. ♝xc2#**.

Exercise #2

Panasewicz–Wroblewski, Lodz, 1953

Black is unable to win. **1...♖f3+ 2. ♜xf3**; if **2...♗xf3 ♜g1+** and

- I. **3. ♜e2 ♜f1+ 4. ♜e3 ♜g1+ (4...♞e1+ 5. ♜xe1 ♜xe1+ 6. ♗e2 ♜g3+ 7. ♜d2 ♜g5+ 8. ♜c2 ♜xh6 9. ♞b3 ♜xg7 10. ♞b7 +-)** **5. ♜e2 ♜f1+ =**;
II. **3. ♜f2 ♜c1+ (3...♜g5+ 4. ♜e2 ♞b2+ 5. ♜f1 ♞xf2+ 6. ♜xf2 ♜xh6 7. ♞a8 ♜xg7 8. ♞xa6+ ♜c7 9. d6+ ♜b7 10. d7+-)** **4. ♞d2 ♜c3+ 5. ♞d3 ♜c1+ =**.

2...♜h1+ 3. ♜g4 ♞g1+ 4. ♞g3 ♜xe4+ 5. ♜g5 ♞xg3+ 6. ♜f6 ♞f3+ 7. ♗xf3 ♜xf3+ 8. ♘f5+ ♜xf5+ 9. ♜g7 g5 10. ♜h2 ♜g6+ 11. ♜h8 f6 12. ♞a8 a5 13. ♜b2 1-0.

Exercise #3

Selesniev, 1921

1. d7 ♜c7 2. d8 = ♜+ ♜xd8 3. 0-0-0+ winning. The less than obvious castling maneuver could be easily overlooked.

Exercise #4

Shinkman, 1887

1. 0-0-0 ♜xa7 2. ♞d8 ♜xa6 3. ♞d7 ♜xa5 4. ♞d6 ♜xa4 5. ♞d5 ♜xa3 6. ♞d4 ♜xa2 7. ♞d3 ♜a1 8. ♞a3#. Here too the move 0-0-0 is easy to omit from the set of considered alternatives A.

It has to be admitted, however, that **1. ♜d2** is no slower, e.g. **1...♜xa7 2. ♞e1 ♜xa6 3. ♞e7 ♜xa5 4. ♞e6 ♜xa4 5. ♞e5 ♜xa3 6. ♜c3 ♜a4 7. ♞c5 ♜a3 8. ♞a5#**.

Exercise #5

Ribli–Adorjan, Hungary, 1983

1... ♖f1! 0-1.

Another example where we have to include obscure openers in the set of alternatives **A**. Chess is not a game of single moves; chess is game of ideas. That is why it is easier to discover the unobvious moves of the last three examples if we search creatively, not mechanically, for combinative motifs.

Exercise #6

Pauly, 1910

1. ♖b5+ (1. ♖e5 0-0!) 1... ♗f8 2. ♖f5+ ♗e8 3. ♖e5 with mate next move, the point being that Black has since lost castling rights.

In this example it was necessary to uncover a strong reply by the opponent. This is an exceptionally important skill: to search for your opponent's strong continuations with the same diligence as for your own.

Exercise #7

Tichy–Schoeneberg, Prague, 1981

1... ♗h8?? 2. ♖c2! 1-0. After 1... ♗f8 the game is drawn by 2. ♖c2! (anyway) 2... ♖f1 3. ♖b1 ♖e2 4. ♖c2.

While considering possible variations in a game, we look not only for our own strong moves, but also strong ones for the opponent!

Exercise #8

Em. Lasker–Loman, London simul., 1910

1... ♖c3+ 2. ♗g4?? (2. ♗f2 wins!) 2... ♖c4+ 3. ♗g5 ♖h4! 4. ♗×h4 g5+ 5. ♗×g5 ♗g7 0-1. Another example of overlooking an opponent's surprise reply.

Exercise #9

Richter–NN, Berlin, 1930

1... ♖h1+ 2. ♗×h1 g×f2 3. ♖f5! 1-0. When we ourselves initiate a combination we should always remember to examine various combinational replies of our opponent.

Exercise #10

Loyd, 1878

1.f8=♖! (1.f8=♗? ♖f4+ 2.♗xf4 draw) **1...♖c4 2.♖c8 ♗g3 3.c7 ♗f3 4.♖f8+ ♗e3 5.c8=♗** and White wins.

Exercise #11

Babushkin–Postnikov, USSR, 1970

1...h3?? (1...♖e1 2.e7 ♖xe3 with an easy win.) **2.e7 h2 3.e8=♗!!** and a draw by perpetual check!

Exercise #12

Kaminsky–NN, 1903

1.d8=♗+! (1.d8=♗? ♖xh6+ 2.♗xh6 c1=♗+ =) **1...♗f6 2.g8=♗+!** (2.g8=♗ ♖xh6+ 3.♗xh6 c1=♗+ 4.♗h5 ♗h1+ 5.♗g4 ♗g2+ 6.♗f4 ♗xg8) **2...♗f5** (2...♖xg8 3.♗xg8 ♗e5 4.♗c6+ ♗e4 5.♗b4+-) **3.♗e7+** and White wins.

Exercise #13

Soszynski–Jefferies, corr., 1996

Black hopes for 1.♗xg7 ♖xc8 2.♗xh5 ♖xb8, but here is what happens instead: **1.♖xg6! ♗xg6** The queen is obviously taboo. 1...♖xc8? 2.♖xg7+ ♗h8 3.♖xc8+ ♗e8 4.♖xe8#. **2.♗e8+ ♖gf7** If 2...♗g5 3.♗e3+ followed by a rook check. **3.♗g8+ ♗f6 4.♖b6+ ♗e5 5.♗e8+ ♗f4 6.♗e3+ ♗xf5 7.♗xd3+ 1-0.**

Exercise #14

Bremel–Kertis, Budapest, 1948

1.a7 axb1=♗ 2.a8=♖+! (2.a8=♗+ ♗b4 3.♗b7+ ♗c3 4.♗xb1 =) **2...♗b4 3.♖b8+ ♗c3 4.♖xb1** and White wins.

Exercise #15

Rinck, 1916

1.♗e4+ (1.e6 ♗f6 2.♗d5 ♗c5 3.b7 ♗a7 4.♗a2 ♗e7 =) **1...♗h6 2.b7 ♗g7 3.b8=♗!** with a win for White. If instead 3.b8=♗? ♗xe5+ 4.♗xe5=.

Exercise #16

Hartston and Wason, 1983

- (a) White wins by **1.a5!**. 1.♖e4? allows Black to draw by 1...a5! (not 1...♖f7? 2.♗d5 ♖f6 3.♗c6 ♖xf5 4.♖b6 ♖e6 5.♗xa6 ♗d7 6.♖b7 winning) 2.♖f4 ♖f7 3.♗e5 ♖e7 4.♗d5 ♖f6 5.♗c5 ♖xf5 6.♖b5 ♖e6 7.♗xa5 ♗d7 8.♖b6 ♖c8 = .
- (b) If it was Black to move, only **1...a5!** would draw; everything else loses.

Exercise #17

Em. Lasker–Euwe, Nottingham, 1936

The position is roughly balanced, but it is important to see that one of the plausible candidate moves is a loser: **1...♗a5?? 2.b4! ♗xb4 3.♗c2** and Black eventually resigned.

Exercise #18

Flohr–Euwe, Semmering, 1937

1...♞g3? 2.♖c2! Yet 1...♞xb2 wins straightforwardly.

Exercise #19

Loyd, 1869

1.♖f1 g3 (1...♗b2 2.♖b1 g6 3.♖xb2#; 1...♗d4 2.♖d3 g6 3.♖xd4#; 1...♗f6 2.♖f5 g6 3.♖xf6#) **2.♗g6+ h×g6 3.♖h3#**.

Exercise #20

Klovsky–Muratov, Moscow, 1967

The game ran as follows: **1.♗g6+! h×g6??** (1...♖g8 2.♗f4) **2.f×g6 ♖g8 3.♖h4 ♖e6 4.♖h7+ ♖f8 5.♗h6 ♗c7 6.♗g5 d5 7.♗×f6 g×f6 8.g7+ ♖e7 9.g8=♖+ ♖d6 10.♖g3+ 1-0**.

Exercise #21

Forintos–Larsen, Monte Carlo, 1967

After **1.♞a2**, one must retreat the bishop and accept a draw! ½-½. If Black plays for the trap 1...g3?? 2.b8=♖?? g2+ he would lose after the more precise **2.♞g2!!**.

Exercise #22

Fine–Yudovich, Moscow, 1937

1.d4 d5 2.c4 e6 3.Nc3 Nf6 4.Nf3 c5 5.Bg5 cxd4 6.Nxd4 e5 The first, fourth and sixth moves were played by Mikhail Yudovich Sr. after several minutes' thought, or after pretended hesitation. He wished to create a certain psychological impression on his opponent.

7.Ndb5 So far it had been held that 7...d4 8.♖d5 ♗×d5 9.♗×d8 ♗b4+ 10.♗c3 d×c3 gives Black a good game. Reuben Fine had already played this position (against William Winter, Hastings, 1936-37), and strengthened the variation: 10.♗d2 ♗×d2+ 11.♗×d2 ♗×d8 12.c×d5 b6 13.g3!. Now, on the basis of his opponent's longer deliberations, he believed that Yudovich did not know the improvement.

7...a6 With this move, which must have surprised Fine, we reach the diagrammed position. **8.♗×d5** There was still time for 8.♗a3! d4 9.♗d5 ♗×d5 10.♗×d8 ♗b4+ 11.♗d2 ♗×d2+ 12.♗×d2 ♗b4!, or alternatively 8.♗a4 ♗d7 9.c×d5. **8...a×b5 9.♗×f6+** (With the idea 9...g×f6 10.♗×d8+ ♗×d8 11..♗×f6+.) **9...♗×f6!! 10.♗×f6 ♗b4+ 11.♗d2 ♗×d2+ 12.♗×d2 g×f6 13.c×b5 ♗e6** and Black won in 43 moves. Incidentally, Black's ninth move reappeared in Shakarova–Zankovich, Simferopol, 1989.

Exercise #23

Geller–Weltmänder, Gorki, 1954

1.e4 e5 2.♗f3 ♗c6 3.♗b5 a6 4.♗a4 ♗f6 5.0-0 d6 6.c3 ♗×e4 7.d4 ♗d7 8.♞e1 ♗f6 9.♗×c6 ♗×c6 10.d×e5 d×e5 11.♗×d8+ ♞×d8. In the game Lilienthal–Alekhine, Paris, 1933, the world champion played 11...♗×d8 after a minute's thought, seeing the later sortie to h6 by the white bishop! **12.♗×e5 ♗e4 13.♗d2 ♗e7 14.♗×e4 ♗×e4** – Reaching the diagrammed position. **15.♗h6!!** with advantage to White.

Exercise #24

Sherbakov–Furman, Moscow, 1955

1...f×e6 2.♗×g6+ ♗g7 3.♗e4 ♞f8 4.g3 ♗×e4!! A surprise move, which White should have foreseen before playing 1.♞e6. **5.♗×e4 ♗e8** and Black soon won.

Exercise #25

Ancygin–Zhuravlev, Minsk, 1952

Black played **1...♖f3+?** **0-1**. White resigned in view of the variation **2.♖xf3 gxf3 3.♗xf3 ♖g1**, but **3.♗f2! ♖h1 4.♗f1** would draw. Winning for Black was **1...♗g1**, intending to advance the h-pawn and making **2...♖f3+** a real threat.

Exercise #26

Chigorin–Blackburne, Vienna, 1898

White has an enormous material advantage. This has numbed his vigilance. Black played **1...b3** as a last chance, after which White responded very casually **2.♖f8**. There followed **2...bxc2 3.♖c5+ ♗a8 4.♖fd4??** It sufficed to move the other queen. To Chigorin it seemed that in this position it was all the same whatever he played. **4...♖xa5+ 0-1**. The finish could be **5.♙a2 ♖e1+! 6.♜xe1 c1=♖#**.

Exercise #27

Onescius–Gama, Bucharest, 1955

0-1. White resigned, but he could have finished the game in his favor. **1.♖g7+!!** and either **1...♗xg7 2.hxg4**, or **1...♙xg7 2.♙d8+ ♙g8 3.♙xg8+ ♗xg8 4.gxh4**.

Exercise #28

N. Fischer–Ghitescu, Bucharest, 1962

0-1. White resigned since he reckoned he would lose in the pawn race. In fact it was possible to draw thus: **1.bxa5 bxa5 2.♗f2 ♙xf3 3.♗e3!!**, or by the transposition **1.♗f2 ♙xf3 2.bxa5** etc.

Exercise #29

Strekalowski–Rudenko, Moscow, 1961

White could have gone for **1.♜xd5 ♙xf2 2.♖xf2 ♖xa1+ 3.♖f1 ♖d4+**, and **4...♖xd5** with an equal game, or tried for more with **1. ♙e1 ♙xe1 2.♖xe1 ♙c6 3.♜d5! ♙d7 4.♜c3**. However, he played **1.♙b1** and his opponent resigned **1-0**. Yet Black could have saved himself with **1...♙xa2!! 2.♙xb2 ♙xb2**, and **3...♙b1**.

Exercise #30

Feuerstein–Mednis, New York 1956

It is better to accept a draw than play the losing **1. ♖b7? ♙c6!! 0-1**. If **2. ♙c6 a2 3. ♖a7 ♙c5+**. Draw proposals in simple positions can deaden alertness.

Exercise #31

Hedke–An. Sokolov, Biel, 1992

Every now and then you have to be taught a nasty lesson. **1... ♙xh3?**, optimistically hoping for **2. g×h3 ♜xf3+**, is refuted by **2. ♙d5 ♜f5 3. g×h3 1-0**. The game would be about level after a more prudent move such as **1... ♙b7**. On the other hand, rather than the bishop backing the queen, a bit of lateral thinking suggests the opposite, **1... ♜a8!** first.

Exercise #32

Foltys–Sajtar, Marianske Lazne, 1951

White wants to deflect the black queen from protecting the knight on f6; therefore **1. ♙c7! ♜×c7 2. ♗×f6+ g×f6 3. ♙×f5** leaving Black's kingside in a mess.

Exercise #33

Caro-Kann Defense (colors reversed)

A trappy position very well known to theory. It would usually be reached by **1. e4 c6 2. d4 d5 3. ♗c3 d×e4 4. ♗×e4 ♗d7 5. ♗g5 (5. ♙c4 ♗gf6 6. ♗g5 transposes) 5... ♗gf6 6. ♙c4 e6 7. ♜e2**, except that for this exercise we have swapped the colors. From the diagram, all pawn moves lose to **1... ♗×f2!**, as does almost everything else (e.g. **1. ♙e2 ♗×f2 2. ♜×f2 ♜×e3+ 4. ♜g3 ♙d6+ 5. ♜h4 ♜h6#**), while **1. ♜c2** can be answered by **1... ♙×e3!**.

Really, the only move that fights for equality is **1. ♗b3!** (**7... ♗b6!** in the Caro-Kann Defense.)

Exercise #34

Kasparov–Svidler, Internet Chess Club blitz, 26 May 1998

Virtually everyone (pun intended), it seems, plays in cyberspace these days, though usually under an alias. For this particular game White bor-

rowed the handle *Dahlia*, while Black used his initials, which are *PBS*. Despite the game being “only” a 6-minute so-called “friendly,” Kasparov shows serious precision: **1. ♖xh6+! ♜xh6 2. ♖c1+ ♜g7 (2... ♗d2 3. ♖xg1 ♗d2!) 3. h6+ ♜h8 4. g7+ ♜h7 5. ♖g1 ♖d8 6. g8= ♖+ ♖xg8 7. ♖g7+ 1-0.**

Exercise #35

Zukertort–Knorre, Wroclaw, 1866

The Polish player has a one-move win. **1. ♗c1! 1-0.** There is no real defense against ♗xh6.

Exercise #36

Langrock–C. Engelbert, Hamburg, 2000

The fianchetto fortress (f7-g6-h7, ♗g7, ♘f6) usually gives the impression of being a tough nut to crack. However... **1. ♗f5!** Many combinations hit this very spot. **1... ♖c5** – If **1... gxf5 2. ♖g5** and the defense **2... ♗e8** is impossible, because the queen on e7 would be hanging. These extra nuances must not be overlooked by tacticians. **2. ♗xg7 gxf5 3. ♖g5 1-0.** The fortress fell amazingly quickly.

Exercise #37

Chigorin–NN, simul., 1880

Mikhail Chigorin actually played **1. ♖d3?**, and was lucky not to have been punished by **1... ♗f5**. The path he should have taken was **1. ♗f7+! ♖xf7 2. ♖d8+ ♜xd8 3. ♖xf7 f×g5 4. ♖d1+ ♗d7 5. ♖e6** (This makes it plain that Black will not have sufficient compensation for the queen, which was the only reason to doubt **1. ♗f7+.**) **5... ♜c8 6. ♖xd7+ ♜b8 7. ♖xe7** winning.

Exercise #38

Havasi–Capablanca, Budapest, 1929

Black has several moves that bring him closer to victory. The game actually finished **1... b5 2. d5 e×d5 3. e×d5 b4 4. ♖d2 b3 5. ♖b2 ♖c2 6. ♖e3 ♖×b2 7. ♖×b2 ♗c4 8. ♖c1 ♖a3 0-1.** However, there is also a combinative win: **1... ♖xf3! 2. g×f3 ♖d1+ 3. ♜g2 ♖c1.** Capablanca was so extremely strong strategically and in the endgame, that he could afford the occasional tactical reluctance or oversight. Alas, that does not apply to the rest of us.

Exercise #39

Capablanca–Crossland, Sheffield simul., 1919

Capablanca sacrificed a rook on g7, and has just now swung the other one across. These are just the kind of things to induce panic in the opposition during a simultaneous display. The game finished 1...♖f6? 2.♙xg7 ♜f4+ 3.♜b1 ♜h2 4.♜f1 f6 5.♙h6+ 1-0. Perhaps if he had stayed calmer, Black would have found 1...♜h4! 2.♙xg7 ♜xf2, and triumphed against a future world champion.

Exercise #40

Asmundsson–Bjerring, Ribe, 1973

We hope you did not waste too much time looking at 1.♜a4+. The game finished 1.♙xa5! ♜xa5 2.♙xf7+ ♜f8 (2...♜xf7 3.♜d7+) 3.♙g5 ♙f6 4.♜d7 ♙e7 5.♙b3 1-0.

Exercise #41

Von Bahr–Dzevlan, Stockholm, 2000

1.♙xf7! ♜xf7 2.♜c4+ ♜f8 3.♜e6 ♖g8 4.♜xf6+ ♜e8 5.♜e6+ ♜f8 6.♙b5 1-0. If 6...cxb5, White can choose either 7.♜f6+ or 7.♙c7.

Exercise #42

T. Kuhn–Zaas, Ohio, 1960

The game started 1.e4 c6 2.d4 d5 3.♙c3 dxe4 4.♙xe4 ♙d7 5.♙f3 ♙gf6 6.♙xf6+ ♙xf6 7.♙c4 ♙g4 8.c3 ♜c7.

From the diagram White won by 9.♙xf7+?? ♜xf7 10.♙e5+ ♜e8?? 11.♙xg4 1-0, but the reason for all those question marks is of course 10...♜xe5+! 11.dxe5 ♙xd1, when it is Black who is winning. There is no quick forced win for White; he has to be content with such lines as 9.♜b3 e6 10.♙e5 or 9.h3 instead.

The identical type of ambush exists after 1.e4 d5 2.exd5 ♜xd5 3.♙c3 ♜d6 4.d4 ♙f6 5.♙f3 a6 (or 5...c6) 6.♙c4 ♙g4 7.♙xf7+??, etc. Having seen these simple traps in print, you now have absolutely no excuse for falling for them in “real life.”

Exercise #43

Hodgson–Arkell, Surrey, 1996

Initially, perhaps Black would like to play 1...♖h4 straight away, but then he notices that the king can escape via e3 after 2.♗g×h4 ♕f2+ 3.♙×f2 ♙g3+. Hence he covers that exit with 1...♗c4!! . White was indeed quickly mated by 2.♖c2 ♖h4 3.♗g×h4 ♕f2+ 4.♙×f2 ♙g3# 0-1.

Exercise #44

P. Blatny–Formanek, New York, 2000

1.♗×h5! g×h5 1...♙c7 (best) can be answered by 2.0-0-0. 2.♙×h5 e5 2...d5 3.♗e4! When this knight lands on f6 and is captured, the g-file will be fatally opened. 3.♖g1 1-0. White threatens 4.♙h6 and 5.g6, among other things.

Exercise #45

Ornstein–Reshevsky, Reykjavik, 1984

1...♗×f3+! 0-1. White had no wish to see 2.♗×f3 ♕×c3 3.♙×c3 ♗e2+.

There is quite a lot of mention of juniors in this book, so it is worth adding something about someone at the other end of the age scale. Samuel Reshevsky (1911-1992), once a child prodigy himself, tied for first place in this open tournament. Allan Savage remembers an incident from the New York Open of the same year. “Watching one evening’s adjournment session, I remember Sammy grinding down a young opponent in a roughly equal position on into the late hours, when nearly everyone had gone home to bed. At 73 he had more energy and will to win than the vast majority of the participants. Seeing him sitting there in his famous cap, giving his all, will always remain with me as an inspiration.” In those respects at least, Reshevsky would be a suitable role model for any aspiring player.

Exercise #46

L. Paulsen–Anderssen, Leipzig, 1877

There is no getting around the fact that Black is worse whatever he does, though that is no excuse for losing his cool. 1...♗g3+?? 2.h×g3 ♖f6 3.♖f2! (...) 1-0. Black should have tried the sidestep 1...♖ab8! first, which turns ...♗g3+ into a genuine threat, and ensures that he is still in the game.

Exercise #47

Stefansson–V. Jandovsky, Pardubice, 2000

White is well aware of Black's loose rook on h8. **1. ♖xd4! exd4** (1... ♖xh3 2. ♖xc6) **2. ♗xd7+ ♗xd7** **3. ♖xh8 ♗e6** **4. b3** **1-0.**

Exercise #48

Soszynski–Henderson, Nottingham, 1999

1. ♖f5!! ♖xe4 This is the line White has to consider most carefully before playing 1. ♖f5. Of course 1...gxf5?? is soon mate after 2. ♖g5+, as are 1...b4 2. ♗f8! bxc3?? 3. ♖xh8+, and 2...♗h5 3. ♖xh5! gxh5 4. ♗g7 ♗xg7 5. ♖g5. **2. ♖xe4 ♖xd2+ 3. ♗xd2 gxf5 4. ♖xd6 ♖d8 5. ♗h5!** This would also be the answer to 4...♗f6. **5...♖f6 6. ♗xf7+ ♗h7 7. ♗f8+ ♖h5 8. ♖xh5#** **1-0.**

Exercise #49

Pecot–Hedrrera, email, 1998

This exercise is one of our favorites. We trust you avoided the little booby-trap 1. ♖xc7+?? ♖xc7 2. ♖b7 ♖e7! winning, e.g. 3. ♗xg4 ♗f6 4. ♖xe7 ♖xe7 5. ♗g5 d4!. (Incidentally, John Nunn would call 2...♖e7, which moves along a line of mutual attack, thus making it hard to spot, a “collinear” move.)

Correct is the game continuation **1. h5! gxh5 2. ♖h1 ♖c1 3. ♖xh5+ ♗f8 4. ♖h8+** **1-0.** 1. ♗xg4 ♖e7 is not so clear-cut.

Exercise #50

Szpiro–Stahlberg, Jurata, 1937

1... ♖h1+ 2. ♗e2 is nothing special. 1... ♗d6 looks natural, but best of all is **1... ♗e7!!** intending 2. ♖h7 ♗f6! The game continued **2. ♖xe7** (2. ♖g7 ♖h1+ 3. ♗d2 ♖h8 4. ♗c2 ♖h2+ 5. ♗d2 ♖e4+ 6. ♗b3 ♗d7 with a clear advantage) **2... ♖h8 3. ♗d1 ♖e4 4. ♗d2 ♖h1+** (4...b6!) **5. ♗e2 ♖h2+ 6. ♗d1 b6 7. ♖c1 ♗b7** **0-1.**

Exercise #51

Kl. Schulz–S. Bücker, Bad Neuenahr, 1987

Black is already two pawns down, so cannot afford any imprecision with his next move. In fact he draws by **1... ♖d6! 2. ♖xd6 ♖e3+ 3. ♗g2 ♖e2+** $\frac{1}{2}$ - $\frac{1}{2}$.

Exercise #52

M. Probert–G. Ward, 199?

Even if it was not appearing in a set of exercises, your tactical sixth sense should still tell you something is “on.” **1. ♖b5! ♙c5+** (1... ♗xd1 2. ♖axd1 cxb5 3. ♖d8#) **2. ♖h1 ♗d7 3. e6** (Or, more accurately, 3. ♗xd7+ ♖xd7 4. ♖g4+ ♖e8 5. ♖c7#.) **3... ♗xd1 4. ♖c7# 1-0.**

Exercise #53

Deacon–Anderssen, London, 1862

Naturally, you should not assume that every threat must be parried. Simply play **1... e4!** regardless. **2. ♗xf7+ ♖h6 3. ♖xf4 ♗xf4+ 0-1.**

Exercise #54

L. Davis–Moreland, corr., 1990

Here is (another) reminder to get your priorities right. Black seems bound to lose his d4-knight. “What, lose the knight? I’d rather give up the queen!” **1... ♗xe4! 2. ♙xe4 ♙xe4** Black’s bishops are completely unopposed. **3. ♖f2 ♖fd8 4. ♖f1 ♖c2 5. ♗h5 ♖xc4 6. ♖g1 ♙c5 0-1.**

Exercise #55

Tartakower–Schlechter, Vienna, 1908 (variation from the game)

The position shows a neat mate in four. **1... ♖f2+ 2. ♖h1 ♖h2+! 3. ♖xh2 ♖f3+ 4. ♖h1 ♖xg1#.**

Exercise #56

Westman–Havanski, Cracow, 1964

When played accurately, it is all over very quickly. **1. ♙xd6! cxd6 2. ♖xe8! ♖xe8 3. ♙f5+! 1-0.**

Exercise #57

Kashdan–Reshevsky, New York, 1940

The position is no more than drawn. **1... d1=♗** (If 1... d1=♖+ 2. ♖d2) **2. ♗e7+ ♖h6 3. ♗g5+ ♖g7** Now White can secure the half-point with 4. ♗e7+ again, e.g. 4... ♗f7 5. h6+! ♖g8 6. h7+ ♗xh7 7. ♗e8+ etc. In the actual game, though, he went badly wrong: **4. ♗xg6+?? ♖f8 5. ♗d6+ ♖e8 0-1.**

Exercise #58

Soszynski–Hansford, corr., 1992

The game started **1.b3 e5 2.♘b2 ♗c6 3.e3 d5 4.♘b5 ♘d6 5.f4 f6** (5...♗h4+ 6.g3 ♗e7 is safer.) **6.♗h5+ g6 7.♗h4 exf4 8.♗f3 fxe3** (8...♗f7!?) **9.0-0 ♗e7 10.♗c3 ♘e6 11.♗d4 ♗d7** Reaching the diagrammed position. **12.♗xf6! ♘f5 13.♗xd5 0-0-0? 14.♗xc6 bxc6 15.♘a6+ 1-0.** Black is facing the prospect of 15...♗b8 16.♗f7! ♗e8 17.♗xc7! ♘xc7 18.♗b4+ forcing checkmate.

Exercise #59

Krakops–St. Pedersen, Gausdal, 2000

A sacrifice prepares a double attack. **1.♘xa6! bxa6 2.♗xa6+ ♗b8 3.♗c4 1-0.**

Exercise #60

Abrahams–Booth, 1923

Black's passed a-pawn is an irrelevance. White wins by overloading the defending bishop. **1.f6! gxf6 2.g4! hxg4 3.h5 ♘f8 4.h6 ♘xh6 5.♘xd6+! cxd6 6.c7**, etc. A slower alternative is 1.g4 g6 2.fxg6 fxg6 3.gxh5 gxh5 4.♗d4! and 5.♘g5.

Exercise #61

Monacell–Shedd, corr., 1984

- (a) Just testing. It is your own fault if you searched endlessly for a “big” move for Black. There is nothing very remarkable going on, except that in the light of the game continuation below, if it was Black's turn he would be best advised to retreat his dark-squared bishop. Instead, 1...♗d7 is met by ♘a6-b7.
- (b) White wins with **1.♗xh4! ♗xh4 2.♗xd5! ♗a6** (2...cxd5 3.♗xd5 ♗f6 4.♘b5+) **3.♗a4 ♗e7 4.♗xe7 ♗xe7 5.♗xc6 ♗ad8 6.♘xa6 ♗xg4 7.♗c7+ ♗d7 8.♘d6+ ♗e8 9.♘b5 1-0.** 1.♗xd5 gets the combination the wrong way round because it would allow 1...♘f2+.

Exercise #62

Hort–Hübner, Athens, 1969

White maintains his advantage by **1.♗d1!** He is right to reject both 1.♗d2 ♗e5!, and 1.♘xf6 ♘xd4 2.♘xd8 ♘xc3.

Exercise #63

NN–NN, Prague, 1957 (variation from the game)

If 1. ♖xe4 ♜e8! with only a slight plus for White. The move that wins, by fully exploiting Black's back rank weakness, is 1. ♜a7!!, e.g. 1... ♜e8 2. ♖xe7.

Exercise #64

P. Georghiou–Yekta, Kensington, 1996

Rather obvious, but did you justify it? 1. ♘xd5! cxd5 2. ♗xd5 ♜e6 (2... ♜c8 3. ♗c5) 3. ♗e5 ♜c8 4. ♗c1 (or ♗c5 as in the last note) with an overwhelming position.

Exercise #65

Busnardo–NN, Rome, 1590

It is mate in three. Not too hard to find, but find it you must. 1. ♗e6+! ♜xe6 2. ♜e8+ ♚ge7 3. d5# 1-0.

Exercise #66

Akimov–Pridorozhni, St. Petersburg, 2000

The important thing is to foresee 1... ♗d8?? 2. ♜xd8+! 1-0, because White unpins himself after 2... ♜xd8 3. 0-0-0+!. Black should consider 1... ♗xc3+ and 2... ♗b8 or 2... ♗d8.

Exercise #67

Mackay, 1920

Only two moves are needed; the first is 1. ♗e3!, followed by

- i. 1... ♜d8 2. ♗b6#;
- ii. 1... ♗b7 2. ♜xd7#;
- iii. 1... ♜e7 2. ♗c3#.

Exercise #68

Miles–Summerscale, Dublin, 1993

A promiscuous bishop entices the black queen away from her essential duties nearer home. 1. ♗b4! ♜xb4 2. ♘xf6+ gxf6 3. ♜g6+ ♜h8

4. ♖×h6+ ♘g8 5. ♗g6+ ♘h8 6. ♖×f6+ ♘g8 7. ♖e3 1-0.

Exercise #69

Ribli–M. Orso, Hungary, 1977

- i. 1. ♖×f6?! g×f6 2. ♖h5+ ♘e7 3. ♗c4 ♖af8 is a dead-end for White.
- ii. In the game, Zoltan Ribli was happy enough with **1.c×b6 c×b6 2.c4 ♖×a2 3.d5**, soon winning anyway.
- iii. The most decisive line, however, takes advantage of the awful position of Black's queen by 1.a4! b5 2.♖a1!

Exercise #70

Ritson Morry–Mieses, London, 1940

1.♗f2! Was this on your list of candidates? The point of this initially obscure retreat is to avoid the bishop getting hit after ...♖×d5. **1...♖a7** (1...b5 2.♖c6!) **2.b4 ♖×d5 3.♖×c7 1-0.**

Exercise #71

M. Pallova–Sikorova, Ostrava, 1997

Black blundered by **1...♖e5?? 2.♗c6+ 1-0.** However, she could have won with 1...♖e8!. The rook has more options from over there, e.g. 2.♗×f3 ♖d8, or 2.♘c3 f2 3.♗g2 ♖e1.

Exercise #72

Infantozzi, 1983 (conclusion of a study)

1.c7 ♖c4 2.♗b3 ♖×c7 3.♗×f7 ♖b7+ 4.♘c2 ♖b8 is only a draw. White wins with **1.♗b3!**:

- i. 1...♗×b3 2.c7 (Now the black pieces are stumbling over each other.)
2...♖b4 3.c8=♖+ ♗e6+ 4.♘a1 ♗×c8 5.g8=♖+.
- ii. The longest defense is 1...♗g6+ 2.♘b2 ♖d8 3.c7 ♖e8 4.g8=♖ ♖×g8 5.♗×g8 ♗f5, but Black's bishop cannot guard the queening square forever. Typically, the white king will go to b8 to support his own bishop coming to c8. Meanwhile the black king will be unable to exert much of an influence on events.

Exercise #73

Botvinnik–Gligoric, Moscow, 1956

The black king is out of his depth, and liable to get caught in a mating net. Yet if he heads back to the shallow end of the pool, he will be within checking distance of the white knight, which would be bad news for the loose black queen. **1. ♖h1! ♜b3** It is now mate in six. **2. ♗h4 ♜b2 3.g4 1-0.** Since Black resigned, 3.g4 was obviously fast enough, though technically speaking, 3.♖c1 is fastest.

Exercise #74

Kieseritzky–Schweig, Paris, 1849

The primary motif of the position is the queen's lack of squares. Maybe she can be forced to where she does not want to go? **1. ♖e4+ ♜d8 2. ♖e8+** Or 2.♖d4+ ♜c8 3.♖d7! ♜f8 (or 3... ♜h8) 4.g7 winning. **2... ♜c7 3. ♖g8! ♜e7 4. ♖g7! ♜xg7 5. ♖e8+ 1-0.**

Exercise #75

P. Dias–Peixoto, Barreiro, 2000

1... ♖a3, hoping for 2.bxa3?, is needlessly optimistic since Black has something both simpler and stronger. **1...h4 2. ♖e2?** After 2. ♖e4 (or 2. ♖f1) White loses the exchange to 2... ♖h5. Another try is 2. d5! which wins after 2...hxg3?? 3 dxc3!, but simply drops a pawn to 2... ♖xd5. Nevertheless these are preferable to the text. **2... ♜f5 3. ♜d2 e5 0-1.** 4. ♖h2 (or 4. ♖e3) is answered by 4... ♖c4+!

III Solving Methods

In our selective survey of the borderland between chess and psychology, we shall present chess problem-solving methods in psychological terms based on the theories and findings of the Dutch researcher Adriaan de Groot. What will interest us here are the methods that chessplayers most often use during the process of thinking, particularly at important moments or turning points of a game. For instance, in situations where sudden changes in the position arise, or where the necessary conditions for carrying out a decisive blow occur, etc.

Our examples can be used to advantage by trainers, especially those teaching young students a certain systematic way of thinking. The material could also be useful to those semi-advanced chessplayers who, in their self-developmental work, wish to elaborate their own system of methodical thinking in chess.

Let us begin by defining what a method is. De Groot says, “A *solving method* may thus be briefly characterized as a *typical problem transformation*.” [T&C, p. 280.] This means that a general task or problem is replaced by a more specific one – and it is this substitution or transformation that is the so-called method itself. In the case of being faced with a particular position on a chess board, the problem of which move to play next is changed into a problem (or a series of component problems) of how to approach the position overall, how to group or decide between possible plans or moves, etc. It is this change (if it is frequent and systematic enough to be “typical”) that is a method, not its carrying out. So, it is important to understand that we are still at the problem level, and not yet considering the specific elements on the board in detail. “Exchange knights and push the b-pawn” may be an example of a *winning* method, but it is not a *solving* method as here defined.

Methods of solving that are employed subconsciously are methods too, according to de Groot. In his opinion, every technique, procedure, approach or operation that appears in chessplayers’ protocols of thinking aloud, and actually processes a problem, can be treated as a method [T&C, p. 282]. This very broad definition is one reason why the list in this chapter is so varied and so long: twenty-one “methods,” which still does not exhaust the possibilities.

In elaborating the material, four basic sources of information have been utilized:

- 1) The methods most frequently mentioned in the literature of the subject.
- 2) The methods uncovered in the protocols of thinking aloud in de Groot's researches and in those of co-author Jan Przewoznik.
- 3) Chessplayers' own observations, published in the columns of the chess press, or related verbally.
- 4) Our own experience.

1. ANALYSIS OF CRITICAL POSITIONS

We shall start with the most popular method in chess theory. This method appears in three stages.

- 1) Static.
- 2) Dynamic.
- 3) Evaluative.

Static

The chessplayer focuses on certain static piece arrangements on the chessboard, their characteristic "constellations"; he checks the material gains of both sides. The difference between a master and a less advanced player is that the master grasps larger units of significance. Where the weaker player notices individual pieces in the following arrangement...



... the master takes in the entirety as a position with a fianchettoed bishop. In the literature such groupings are often referred to as localized clusters or *chunks*. (If chess were a language, these chunks would be its words.)

Dynamic

In the further sequence the chessplayer turns to analyzing the dynamic possibilities inherent in the position. He considers long-range plans on the board, the opponent's threats, and the threats that he himself may create.

It is worth noting (on the basis of practical experience) that very often both static and dynamic aspects co-exist inseparably in the process of solving chess problems. And the road to chess mastery is through this very association of typical structures on the board with suitable game plans.

The previously mentioned position with the fianchettoed bishop is, in a master's mind, very quickly associated with the possibility of the attack ...♗g4, ...♝d7, ...♗h3, ...h5-h4. All of chess progress depends, among other things, on associating as many such typical structures as possible with the best game plans, maneuvers, etc.

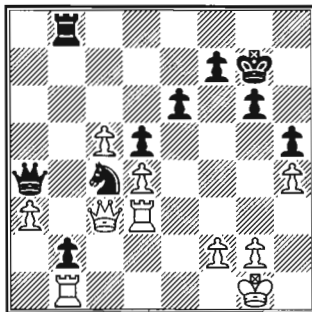
Evaluative

A position's features (static moment) as well as the outcomes of possibilities (dynamic moment) are in the end evaluated (evaluative moment). The testees in most of the protocols would by now express judgements about the positions during this phase. For example, they would say, "It should be a winning position for me."

Let us take, as a case in point, a position from the following game.

Ziatdinov–Yudasin, USSR, 1985

1.d4 ♖f6 2.c4 e6 3.♗c3 ♗b4 4.e3 c5 5.♗ge2 c×d4 6.e×d4 d5
 7.c5 ♗e4 8.♗d2 ♗×d2 9.♝×d2 a5 10.a3 ♗×c3 11.♗×c3 a4
 12.♗d3 b6 13.♗×a4!? ♝×a4 14.♗b5+ ♗d7 15.♗×a4 ♗×a4
 16.♝b4 b5! 17.b3 ♗c6 18.♝c3 b4! 19.♝d3 (19.♝g3!?) 19...♝a5!
 20.b×a4 b3+ 21.♞e2 ♝×a4 22.♞hd1 0-0 23.♝c3 ♞b8 24.♞d3
 h6 25.♞f1 ♗a5 26.♞b1 ♗c4 27.♞g1 b2 28.h4 h5! 29.♞g3 g6
 30.♞f3 ♞g7 31.♞d3



Training #1 Black to move.

Perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.

Now let us compare your deliberations with what was actually taking place on the chessboard.

Static evaluation

Materially, White has a clear qualitative plus. If we had to assess both sides' chances purely on that basis, then we could simply say "A win for White." Of course such an expression is an over-simplification. Weaker chessplayers, who have less knowledge and experience, make this mistake. They assess the material in separation from the particular features of the position and its dynamics.

So, let us consider the position's characteristic features. Here it is worthwhile having one's own analytical framework, comprising the following elements among others.

- 1) Lines (ranks and files)
- 2) Diagonals
- 3) Strong and weak points
- 4) The center
- 5) King placement
- 6) Position of individual pieces
- 7) Pawn structure
- 8) Comparison with typical positions

We should turn our attention to these in the quoted position.

1) Black exerts great pressure down the a-file, down the b-file with the rook, and also has a third option (the possibility of invading b3 and capturing the a3-pawn).

White controls the important third rank; can exert pressure down the f-file, attacking the f7-pawn; and there is the possibility of forcibly opening the position by the move g2-g4, which could blossom into an attack along the g and h-files.

2) White controls the a1-h8 diagonal, making the ...e6-e5 break-through impractical. He also controls the e1-a5 diagonal, which focuses attention on the problem of the exchange of queens on a5. In the future White can

take control of the h2-b8 diagonal, not only bothering the rook on b8, but also threatening a penetration into the black camp on the queenside. While if the knight departs from c4, then harassment of the black king from the e5-square is also threatened. (Incidentally, note how during positional evaluation, the manipulation of static positional elements is inseparably connected to dynamic aspects.)

Black applies pressure along the a4-d1 diagonal, ruling out, for example, placing a lone, unsupported rook on d1; he also controls the important a4-e8 diagonal, forestalling an advance of the c5-pawn, in certain circumstances. It is worth noting that Black could exploit the h8-a1 diagonal to pressure the white center. Detecting such nuances in a position is the first step towards creative play!

3) White's strong points (squares): e5 – where the queen could settle. f3, g3 – whence the rook or queen could attack. d3, c3, b1 – as defensive posts against the strong b2-pawn.

White's weak points: b3 – where a rook could encroach.

Black's strong points: b3 – where a rook could encroach.

Black's weak points: c6 – which square has to be controlled for a long period of time; f6, h6 – as weak areas around the king away from any defensive pieces.

4) The center is dominated by White, who in the so-called extended center has the pawns d4 and c5. In turn, Black has the strong structure of pawns at d5-e6-f7.

5) King placement. The white king is safe. Black's king, lacking the support of his pieces, can come under the attack of the queen, rook, and the f-, g-, and h-pawns.

6) Position of individual pieces. White's major pieces, tied to the defense of the a3 and d4-pawns as well as the b1-square, are very passive. However, in favorable circumstances the queen and rook could attack the black king.

Black has very active pieces – ♖a4, ♜b8, and ♘c4 – which exert pressure on many squares in the opponent's camp. The b2-pawn plays a key role; it is strongly supported and ties the white pieces to the b1-square.

7) Pawn structure. The white c5-pawn could be strong; the advance of the f- and g-pawns could pose a threat; a3 and d4 are weak. Black's main trump is on b2.

8) Comparison with typical positions. Reti's famous idea of the battery placement ♖b2 and ♗a1 can be cited here, as occurred for instance in the following couple of games.

1. ♖f3 d5 2. g3 ♗f6 3. ♕g2 g6 4. c4 d4 5. d3 ♕g7 6. b4 0-0 7. ♗bd2 c5 8. ♗b3 c×b4 9. ♕b2 ♗c6 10. ♗b×d4 ♗×d4 11. ♕×d4 b6 12. a3 ♕b7 13. ♕b2 b×a3 14. ♗×a3 ♗c7 15. ♗a1 (Reti–Rubinstein, Karlsbad, 1923).

1. ♖f3 d5 2. c4 c6 3. b3 ♕f5 4. g3 ♗f6 5. ♕g2 ♗bd7 6. ♕b2 e6 7. 0-0 ♕d6 8. d3 0-0 9. ♗bd2 e5 10. c×d5 c×d5 11. ♗c1 ♗e7 12. ♗c2 a5 13. a4 h6 14. ♗a1 (Reti–Em. Lasker, New York, 1924).
The notion of the queen going into the corner will shortly become pertinent to the Ziatdinov–Yudasin game currently under consideration.

Dynamic evaluation

White can:

- attack the slightly weakened f7-point and the whole black camp on the kingside;
- gain control of more space on the kingside by playing, for example, f2-f3, g2-g3, ♗g1-g2-h3, g3-g4;
- consider the possibility of giving up the rook for the knight on c4 – though in the light of the weaknesses on a3, d4, and the b2-pawn, this idea is of doubtful value.

Black is always threatening, among other things, to:

- break the blockade on the b1-square and advance the b2-pawn;
- invade the b3-square with the rook;
- play the typical break ...e6-e5, in certain circumstances;
- regroup by ...♗a4-b5, ...♗b8-a8-a4, ...♗b5-a6, and ...♗a4×a3;
- march the king over to the queenside, in order to support the attack there, or to avoid White's attack on the kingside.

General evaluation of the position's features and variations

Regarding the regrouping ...♖a4-b5, ...♞b8-a8-a4, ...♗b5-a6, White could then play the queen to c2, intending after ...♘c4×a3 to return the exchange by ♞d3×a3 ♞a4×a3 ♗c2×b2 with equality. Leonid Yudasin, an Israeli GM, found the plan of relocating his king to c6, with a later ...e6-e5 break, very interesting – and that was what he ultimately decided on.

31...♖f8! 32.♞f3 ♖e7 33.♞d3 ♞b5 34.♞f3 ♗a6 35.g3 ♞b7 36.♖g2 ♗a4 37.♞d3? It was necessary to keep the f7-pawn under observation.

37...♖d7 38.♞f3 ♖c6 39.♞d3 ♗a8! 40.♞f3 ♗h8 This shows a very deep insight into the position! He who sees such possibilities demonstrates either signs of superior creativity in chess, or knows the classics well. Compare, for example, the idea of the maneuver ♞a1-c1-c2, ♗d1-a1 (backing a bishop on b2), ♞f1-c1, as occurred in a few of Richard Reti's games when he played the opening that was named after him.

At this moment there occurs an important indicator in the development of a chessplayer's overall knowledge. The precise structure of a position, in this case the pawn structure d4-c5 opposite d5-e6, is linked in a master's mind to certain dynamic possibilities, in this case the ...e6-e5 break. To his mind this structure and associated plan is a single, unitary chunk that he perceives at a glance.

41.♞d3 e5! That is how Black crowns the main idea of his chosen game plan. After 42.d×e5 ♗×e5 43.♗×e5 ♘×e5 44.♞c3 ♘c4, coming next is ...♖×c5, ...d5-d4, and the uniting of Black's forces (♞b7, ♘c4, ♖c5, ♙b2) ought to decide the battle in his favor. It is worth noting here that the player with the black pieces should have had this idea in his plans while examining the position on his 31st move!

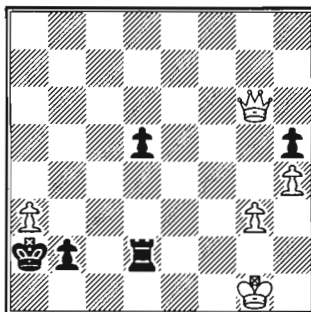
42.♗c2 e×d4! But preferably not 42...e4, because of 43.♗a4+ ♖c7, and suddenly White is penetrating the enemy camp, and posing certain threats to the king, such as harassment by perpetual check. Likewise 42♞♗a8 43.d×e5 ♘×a3 44.♞×a3 ♗×a3 45.e6 would suddenly give White strong counterplay.

Black's play is based on the thinking that the king is a strong piece in the attack, and that White's dispersed major pieces do not pose him a real

threat. In addition, a new element in the struggle has appeared. In certain variations there is a threat of transition to the endgame – which would be won for Black, thanks to his active king position, among other things.

43. ♖a4+ ♜xc5 44. ♖a6 ♜b8 45. ♜h2 ♖a7 46. ♜f6 ♘e5! This move forces events. 47. ♖xd4 ♜xd4 48. f4 ♜d3 Even better was 48... ♜c3, e.g. 49. ♜xe5+ ♜xe5 50. fxe5 ♜c2, or 49. fxe5 ♜b3 50. ♜f3+ ♜a2. In both lines Black beautifully realizes the idea of a king march to the queenside.

49. fxe5 ♜c2 50. ♖e1 Played with a small trap in mind: 50...b1=♜? 51. ♜f2+ ♜c3 52. ♖xb1 ♜xb1 53. ♜xa7. 50... ♜b3! 51. e6 fxe6 52. ♖xe6 ♜a2! 53. ♖b6 ♜xb6 As often happens in strategically conducted games, at the finish one has to demonstrate the ability to calculate variations precisely. 54. ♜xb6 ♖f7 55. ♜xg6 ♖f2+ 56. ♜g1 ♖d2 0-1. The position deserves a diagram because it relates to our training.



Note how Black realized his plan of transferring the king to the queenside. The white pawn on a3 served there not only as an object of attack, but also as a shield defending Black's king. Such details have to be spotted in order to develop the elasticity of your thinking at the chessboard.

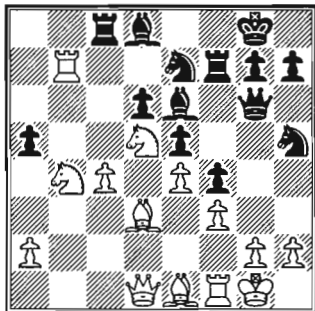
We shall further supplement this important topic with an example from working with young chessplayers. Let us look at a position from the following game.

Schreiber–Szcukiewicz, Straszecin, 1999

1. e4 c5 2. ♘f3 ♘c6 3. d4 cxd4 4. ♘xd4 e5 5. ♘b5 d6 6. c4 ♘e6 7. ♘1c3 a6 8. ♘a3 f5 9. ♘d3 f4 10. ♘c2 ♘f6 11. ♘d5 ♘e7 12. 0-0 0-0 13. f3 ♖c8 14. ♘d2 ♘h5! with the cunning idea of 15... ♘xd5 16. cxd5 ♜b6+ 17. ♜h1 ♘g3+ 18. hxg3 ♖f6! The move 14... ♘h5 was so

dangerous because juniors usually see their own threats better than their opponents' threats. Here the youngster was up to the challenge.

15. ♕e1 ♖e8 16. b4 ♔d8 17. b5 ♘e7 18. b×a6 b×a6 19. ♖b1 ♗g6
20. ♖b7 ♖f7 21. ♘cb4 a5



Training #2 White to move.

(As in the previous example) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

It can be assumed that straightforward exchanges on e7, and a knight incursion on d5, maintain White's advantage. However, in analysis it was necessary to consider an original move...

22. ♗a4 Why is it so difficult to come up with the idea of a queen sortie? Because in the analysis of critical positions it is sometimes hard to realize that two remote areas on the chessboard may have something in common. In this case there exists a secret link between the d1 and e8-squares, which can be seen in the line 22...a×b4 23. ♗e8+ ♖f8 24. ♘×e7+ ♔×e7 25. ♗×g6 h×g6 26. ♖×e7. Which was exactly what the junior had calculated. Except that after the further 26...♔×c4, Black has no future worries! However, even if you had not planned to play 22. ♗a4, you should have spotted it in your analysis.

While working with young players it is worth separating two things – their ideas, and their calculation of variations. Here, the original approach to the position ought to be appreciated, and the creative searching encouraged. But their calculation of variations usually needs polishing up! The game had the further continuation:

22...♘f6 23.♗xg6+ gxf6 24.♗d5 ♖g7 25.♖f2 ♗xd5 26.exd5 e4
 27.♗xe4 f5 28.♖xg7+ ♕xg7 29.dxe6 ♗xe6 30.♗c3+ ♕h6
 31.♗d5 ♖b8 32.♗xe6 ♖b1+ 33.♖f1 1-0. Against the planned
 33...♗b6+, would come 34.c5! ♗xc5+ 35.♗d4+-.

It was not by accident that a junior game was chosen, and an example with the controversial ♗a4. Why? Working with young chessplayers, a trainer will repeatedly analyze critical positions, and assign exercises to solve. In such exercises the quality of the trainer's feedback is very important. Modern psychology indicates that too much negative feedback will over the years build a negative self-image in the player, reducing the motivation to work. And a negative self-image can have an inhibiting effect on a child's creative development, can induce a lack of self-belief during a game, can cause him to be less ambitious, and so on. From certain studies carried out in British schools, it emerges that the proportion of negative to positive feedback on average runs to 4:1! Though of course, a lot also depends here on the personality of the trainer. The game and commentary below can be a classic example.

Trainer–Student

1.e4 a5 2.d4 ♖a6

- Trainer: "Why did you play 2...♖a6?" (The trainer does not at this time depreciate the value of the move.)
- Student: "Because I'm planning ...♖a6-e6-xe4+!"

It is worth acknowledging the fact of strategic planning in a young player! Then you take on a6 with the bishop, and have a little talk about tactics...

Note that we are not proposing a so-called "non-stressful" work method here. Definitely not! It is not possible to live without stress; it represents the precious spice of life, and we develop by meeting challenges. Instead, let us underline that fact, so that trainers who teach children focus on the quality of their commentaries on their trainees' analyses. Trainers can read about the influence of negative feedback on a child's so called "learned helplessness" in the splendid work, *Optimistic Child* (Seligman et al, 1997).

It is worthwhile, though, to create an imaginative approach to the analysis of critical positions. One of many techniques in the psychology of

creativity is the method of discovering analogous solutions. Here are its principles and possibilities of application in chess.

Name of method: Discovery of analogous solutions

Subject: We seek creative and useful solutions, which someone has already applied to similar problems.

Aims: The unearthing of new, creative and useful possibilities of posing and solving problems.

Method:

- 1) We define our problem and its potential solutions; or else, for the moment, do not establish the problem at all.
- 2) We analyze other domains in which similarly structured problems were effectively solved.
- 3) We analyze those effective solutions.
- 4) We search for how we can apply similar solutions to our problem or domain.

Example:

- 1) We want other vehicles to travel more slowly near our own. We are frightened of on-coming, fast-approaching cars.
- 2) We search for a situation in which cars decelerate. The answer is when there is a police car on the horizon!
- 3) We notice that the name “boys in blue” pertains not only to the color of their uniforms but also to their vehicles.
- 4) So, the solution is to paint our car in colors like those of the police.

Chess example:

- 1) We would like to learn the art of “killing” a position, which is sometimes handy in a tournament: kill it, quickly draw it, and we can relax!
- 2) We seek out how others did this. We soon find a shining example – the Swedish GM, Ulf Andersson.
- 3) We analyze a hundred of his games as White.
- 4) We incorporate his opening ideas and fast transitions to safe positions in the middle or endgame, in which nothing untoward can happen. (Typically he starts 1.♘f3 and heads for the English or Catalan Openings.) And in the analysis of critical positions we can employ his methods of pacifying a position.

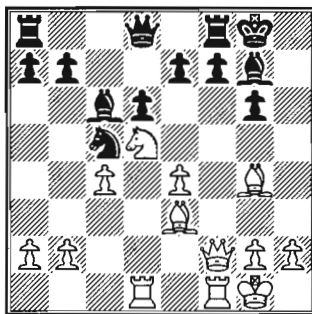
2. GROUPING FORCING AND NON-FORCING POSSIBILITIES

In this method of thought the considered moves become grouped, e.g. divided into moves that force play (i.e. those that compel unique, “only” moves by the opponent), and moves that do not force play (i.e. where the scope of an opponent’s reasonable replies is wider, where he has a greater freedom of choice).

Let us look at a more complicated example of this method.

Larsen–Petrosian, Santa Monica, 1966

1.e4 c5 2.♘f3 ♘c6 3.d4 c×d4 4.♘×d4 g6 5.♙e3 ♙g7 6.c4 ♘f6
7.♘c3 ♘g4 8.♜×g4 ♘×d4 9.♜d1 ♘e6 10.♜d2 d6 11.♙e2 ♙d7
12.0-0 0-0 13.♞ad1 ♙c6 14.♘d5 ♞e8 15.f4 ♘c7 16.f5 ♘a6
17.♙g4 ♘c5 18.f×g6 h×g6 19.♜f2 ♞f8



Training #3 White to move.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

White can sort his possibilities into groups.

- 1) First group: moves that fundamentally do not force the play, that do not “burn one’s bridges,” such as 20.♙×c5, 20.♜h4.
- 2) Second group: moves that force the play, such as 20.e5!!, disturbing the dynamics of the position.

Let us inspect the first possibility. 20.♙×c5 d×c5 21.♘f6+ ♙×f6 22.♞×d8 ♞a×d8 and Black has the familiar compensation for the queen; 20.♙×c5 d×c5 21.♜×c5 ♙×d5 22.♞×d5 ♜b6 23.b4 ♜×c5+ 24.b×c5 with an equal game; 20.♜h4 ♙×d5 21.♞×d5 e6! with good play for Black.

Bent Larsen selects the other possibility, but he has to calculate quite a few forcing variations that unsettle the material balance.

20.e5!! ♖×e5 21.♖h4 ♖×d5 22.♗×d5 ♜e6? Better was 22...e6, though still with advantage to White. **23.♗f3! ♖f6** 23...f5 does not help either, because of 24.♗h3 ♜g7 (24...♜f7 25.♖×f5!) 25.♖f3! ♜f7 26.♗b5 b6 27.♖×a8 ♜×a8 28.♖d4, according to Larsen. **24.♖h6 ♖g7 25.♖×g6!! ♜f4 26.♗×f4 f×g6 27.♖e6+ ♗f7 28.♗×f7 ♜h8 29.♗g5! b5 30.♗g3 1-0.**

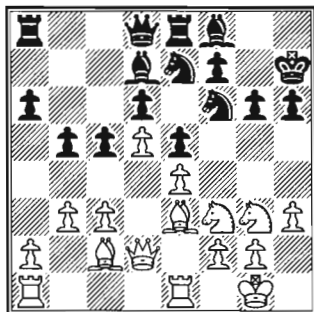
As a rule, choosing forcing moves in very complicated tactical positions will require a lot of thinking time – especially if the necessary calculations are indeed very deep with much branching. That is why certain players decline such choices, even if they feel that a forcing move may win the game. Thus they save time and postpone the denouement until later. A decision like that is also taken when short on time.

3. COMBINING MOVES, GROUPING POSSIBILITIES

Reasonable moves tend to combine into entire groups. Often two such alternate groups are formed. Such an eventuality directs the further process of thought. Let us see a position from the game below.

Tal–Ghitescu, Miskolc, 1963

1.e4 e5 2.♞f3 ♞c6 3.♖b5 a6 4.♖a4 ♞f6 5.0-0 ♖e7 6.♗e1 b5 7.♖b3 d6 8.c3 0-0 9.h3 h6 10.d4 ♗e8 11.♞bd2 ♖f8 12.♞f1 ♖d7 13.♞g3 ♞a5 14.♖c2 c5 15.b3 g6 16.♖e3 ♞c6 17.d5 ♞e7 18.♖d2 ♜h7



Training #4 White to move.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

Here White had two basic groups of moves to consider.

- 1) First group: moves that we shall call risky – 19.♙xc5.
- 2) Second group: moves that we shall call quiet – 19.♘h2, 19.a4, and the like.

Mikhail Tal selects the first of these, which demands the calculation of several moves, plus a rather intuitive evaluation of the position.

Incidentally, we note that the idea realized here has its counterpart in a famous scheme of David Bronstein's: 1.e4 e5 2.♗f3 ♘c6 3.♙c4 ♗f6 4.♘g5 d5 5.exd5 ♗a5 6.d3 h6 7.♗f3 e4 8.dxe4!? ♘xc4 9.♙d4 (Bronstein–Rojahn, Moscow, 1956). This is a typical case of exploiting an analogy during the solving of a problem.

19.♙xc5 dxc5 20.♘xe5 ♘c8 21.f4 ♗e7 22.c4 ♙g7 23.♗f3 bxc4 24.bxc4 ♘d6 25.e5 ♘xc4 26.♗c3 ♙b5 27.♞ad1 ♞ad8 28.d6 ♘xd6 29.exd6 ♗b7 30.♘e5 ♘d7 31.♘h5! ♙h8 32.♗g3 ♘xe5 33.fxe5 ♗d7 34.♗f4! ♙xe5 35.♙xg6+ ♗h8 36.♙xf7 ♙d4+ 37.♞xd4 ♞xe1+ 38.♗xe1 ♗xf7 39.♗e5+ ♗g7 40.♗xc5 ♙c6 41.♞d2 1-0.

Let us add, without now giving examples, that to support the superiority of one move over others, chessplayers apply still more methods. They search for conclusive arguments, compare mutual possibilities, and widen the basis for the arguments in favor of the given move.

4. FORMING THE POSSIBILITIES INTO THREE GROUPS

There is yet another variant of the method of grouping possibilities. While applying this method three areas may be checked.

- 1) The opponent's threats.
- 2) One's own possibilities for taking some sort of action.
- 3) The possibilities of putting long-range plans into effect.

Our use of positions involving two very tactical players was deliberate. Undoubtedly they were often faced with the decision – *quietly or sharply?* And usually with them it was sharp! Similar decisions are taken by every chessplayer.

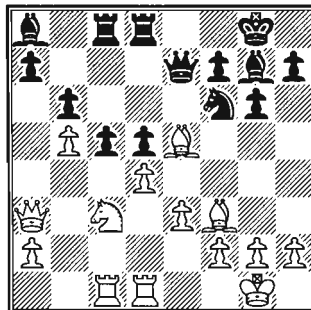
5. PLAN FORMATION

This method's aim and function does not differ from formulating a plan in other disciplines. A plan is a certain order of tasks to execute, a sequence of activities to undertake. The literature on the subject of planning in chess is enormous (e.g., Max Euwe's and Peter Romanovsky's books). Here we shall concentrate on a question that is more involved and at the same time very particular, namely the transformation of game plans. The subject is important, as basically a complete game is a single series of transformations.

An example of the realization of a plan, and the transformation of one advantage into another, is the following creation by Grandmaster Svetozar Gligoric.

Gligoric–Bolbochan, Tel Aviv, 1966

1.d4 d5 2.c4 c6 3.♘f3 ♘f6 4.♗c3 g6 5.♕f4 ♕g7 6.e3 0-0 7.♖c1 e6 8.♗e2 ♗bd7 9.0-0 b6 10.cxd5 exd5 (10...cxd5? 11.♗d6 and 12.♗b5) 11.♗e5 ♗b7 12.b4 ♗xe5 13.♗xe5 ♖e8 14.♝b3 ♖c8 15.♖fd1 ♝e7 16.♗f3 ♖ed8 17.b5 c5 18.♝a3 ♗a8

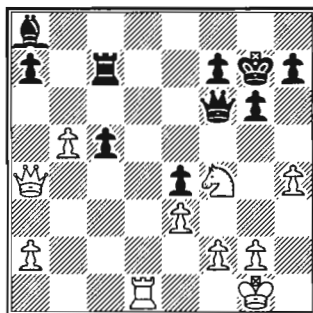


On move 10, White brought about the first weakness in the opposing camp – a backward pawn on c6. Thus White accomplished *aim #1* – the creation of an object of attack in the opponent's camp. Then with the advance b2-b4-b5 he created a different weakness (at d5) and in turn achieved *aim #2* – a reduction in the opponent's possibilities for defense.

Now for a few moves he concentrated on an assault on the new objective.

19. ♖e2 ♖e4 20. ♕×g7 ♜×g7 21. ♖f4 White consistently carries out his plan of pressure on the d5-pawn. At the same time, the necessary conditions have arisen for exploiting the next weaknesses – the dark squares around the black king.

21... ♜d7 22. d×c5 ♝×c5 23. ♝×c5 b×c5 24. ♕×e4 d×e4 25. ♞c1 ♞d6 26. h4 ♞c7 27. ♞b3 ♜g8 28. ♜d1 ♞f6 29. ♞a4! ♜g7



Training #5 White to move.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

30. b6!! This is the next transformation. White is about to achieve *aim #3* – an attack on the king. White’s pieces will look towards the kingside, where Black is weak on the dark squares. **30... ♞×b6 31. ♞e8! ♞c6 32. ♞e5+!** This is how White exploits the weak squares around the opposing king. Now if 32... ♞f6 33. ♞×c7; if 32... ♜f8 33. ♜d8+; and if 32... ♜h6 33. ♞g5+ ♜g7 34. ♖h5+; with a win in all cases. **32... f6 33. ♞×c7+! 1-0.**

We have seen a model example of transformation. White kept creating new objects of attack. Chess is a game (a sport, an art, and a science) directed towards achieving partial objectives. Its nature is such that, as far as possible, one must think about the development of initiative right from the first moves. It is important that along with this comes self-belief, confidence in one’s own capabilities. Let us mention several possible mental blocks, which can hinder development of a player’s full potential, and can negatively modify the choice of plans.

Mental block #1: Erroneous convictions

A general example – “An intelligent person must be a good thinker.” But not necessarily. Intelligent people can produce over-rational solutions, or apply acquired schema. They can be especially insistent on saving face, as rational persons who are always right. Their eloquence may lead outsiders into error. They can draw hurried conclusions from hardly any premises, when the situation requires more detailed analysis. They may be characterized by a certain kind of arrogance, etc.

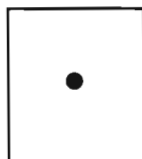
A chess example – “A Grandmaster must know openings extremely well. He cannot be fooled there.” With the result that one unnecessarily searches how to step away to the sidelines.

Mental block #2: The assumption that there is only one solution

Not necessarily. There are chessplayers, like Gary Kasparov, who search for the optimum move in any given position. But there have also been pragmatists, like Tigran Petrosian, who were able to maneuver, not making any binding decisions.

Mental block #3: Inflexible adherence to principles

What can you see in the drawing?



A dot. Or a hole, too – a gap in the white. It is characteristic of our thinking that we more quickly perceive negatives in a picture, for instance in a picture of reality, than positives. We concentrate on the black dot, yet the drawing is 99.5% white. Likewise a page of printed text (like this one) – normally only typesetters would be aware of the white “rivers” flowing around the black words.

A chess example – “A knight on the rim is dim.” Again, not necessarily. There are many variations in which it would play a useful part, even on the edge of the board. In the Reti Opening (1.♖f3 d5 2.c4 dxc4 3.♗a3), the Closed Sicilian (1.e4 c5 2.♗c3 ♗c6 3.g3 g6 4.♕g2 ♕g7 5.d3 d6 6.♗h3), or against the Leningrad Dutch (1.d4 f5 2.g3 ♗f6 3.♕g2 g6 4.♗h3), just to mention a few examples from regular openings.

Mental block #4: Negative thinking

Negativity and excessive criticism can block good ideas. We should try to look at things as “different” or “interesting,” rather than prematurely or needlessly evaluating them as “good” or “bad.” We should avoid the mistake of negativism, and seek out a situation’s underlying possibilities rather than focus on its apparent drawbacks.

Mental block #5: Avoiding risk, or fear of error

A celebrated example from the 3M Company. The company allowed its workers to devote work time to creative research – even up to 15% of working hours. One of its scientists sang in a choir. He used to bookmark important pages in the songbook with slips of paper, which were constantly falling out. This really irritated him. One day, however, he recalled that his colleagues had discovered some sort of defective adhesive, which bonded poorly. He tried it out in various ways and saw that it was excellently suited to bookmarks: it stayed where put, but was easy to unstick, and could be written on. That was how one of the best-selling office products of the 3M Company came into being.

Fear of defeat can so block a chessplayer’s creativity that he wastes the opportunity to play many an “Evergreen” game. Here a positive example would be the risk-taker Tal, or Kasparov. It would be worth having at least a brief look at the latter’s inventive and adventurous approach in the game below.

Kasparov–Short, Sarajevo, 1999

1.d4 ♘f6 2.c4 e6 3.♗c3 ♘b4 4.♗f3 c5 5.g3 0-0 6.♘g2 cxd4
7.♗xd4 d5 8.cxd5 ♗xd5 9.♘d2 ♘xc3 10.bxc3 ♗b6 11.♘e3
♗d5 12.♖d2 ♗d7 13.♘g5 ♖c7 14.♗b5 ♖c5 15.c4 ♖xc4
16.♖b1 ♗7b6 17.0-0 h6 18.♘xh6!? g×h6 19.e4 ♗e7 20.♖fc1
♖a4 21.♖xh6 ♘d7 22.♖c5 ♗g6 23.♖g5 ♖c2 24.♗a3 ♖d3
25.h4 ♖xa3 26.h5 ♖e7 27.e5 ♘e8 28.♘e4 f5 29.exf6 ♖xf6
30.h×g6 ♖g7 (30...♘c6 31.♘c2 ♖g7) 31.♖h7+ ♖f8 32.♖h4 ♖c8?
(32...♘xg6) 33.♖h5 ♘xg6 34.♖h8+ ♖f7 35.♖xc8 ♗xc8 36.♖xb7+
♗e7 37.♘xg6+ ♖xg6 38.♖b4 ♖f5 39.♖xe7+ ♖g6 40.♖h7+ 1-0.

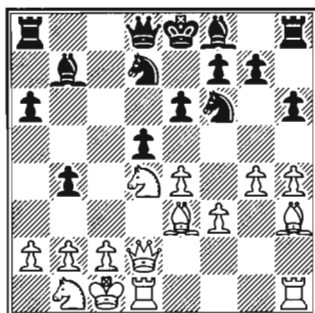
In your own games it is worth noting whether you are sufficiently ambitious in your plans.

6. A PREFERENCE FOR SOME MOVE OR PLAN

During the selection of a move in critical positions, as early as the initial phase of analysis the player's attention becomes directed towards certain possibilities, to the complete dismissal of many others to the background. Of course this focusing results from purely chessic circumstances, but psychological factors also have significance here. Let us borrow inspiration from the experience of Kasparov and see how he builds his plans to fight for the initiative. Here is an excellent game of his with Viswanathan Anand.

Anand–Kasparov, Linares, 1999

1.e4 c5 2.♘f3 d6 3.d4 c×d4 4.♘×d4 ♘f6 5.♘c3 a6 6.f3 e6 7.♙e3 b5 8.g4 h6 9.♚d2 ♘bd7 10.0-0-0 ♙b7 11.h4 b4 12.♘b1 d5 13.♙h3



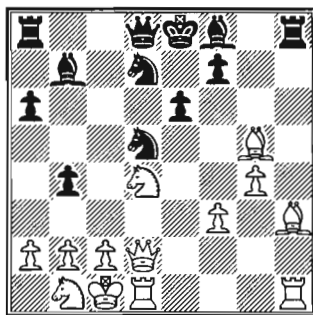
This is the first critical position.

Training #6 Black to move.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

After both 13...♘e5 and 13...d×e4 White can carry out his basic plan of g4-g5-g6, with an attack on the white king in the center. There is also a third, slightly crazy possibility.

13...g5! A radical, “modern” way of stopping White’s pawn storm. Kasparov’s preference for active plans can already be clearly seen. This will be even more evident in the notes to the 16th move. **14.h×g5 h×g5 15.e×d5 ♘×d5 16.♙×g5**



This is the second critical position.

Training #7 It is Black to play.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

This position had already occurred in Anand–Van Wely, a blitz game. Then Loek Van Wely played 16...♖×g5 17.♖×g5 ♔h6. However, it certainly did not suit Kasparov to enter an endgame where he would have to fight hard for a draw, with no chance to win. Passive game plans are simply not his style!

Yet the key to all this is the game Leko–Topalov, played in an earlier round of the same Linares tournament. In that game Black adopted the sortie 16...♖a5, attacking the a2-pawn, but at the same time running the risk of a white rook invading the h-file. Activity met by even greater activity. Kasparov, on the other hand, chooses active moves that simultaneously demobilize the opponent’s pieces.

16...♖b6! Kasparov carries out his basic plan of active play in the center, involving these points:

- 1) In the case of a rook exchange (...♖×h1, ♖d1×h1), Black increases the pressure on the d4-square with the help of two pieces, the queen and bishop, by playing ...♗f8-g7.
- 2) The plan is also based on the strong position of the knight, which both keeps the white bishop off the e3-square, and threatens the tactical blow ...♘d5-c3. Various tactical threats, arising as if incidentally during

the realization of the plan, are also a characteristic feature of Kasparov's conception of the game.

3) Planned is a combined initiative down the a7-g1 and h8-a1 diagonals, and the c-file, exploiting the tactical threats ...♖c8, ...♗d7-c5, and (after first exchanging on d4) ...♗c5-b3+.

4) An important positional element is the weak placement of the knight on b1, together with the cramped situation of the white king.

5) Another important element in Black's plans is – time! As we shall see, the tactical threats will gain tempi for his attack.

All the time we observe *consistent concentration on searching for lively plans of action, active moves*, avoiding passive ones.

17.♗g2 ♖xh1 18.♗xh1 ♖c8! 19.♖e1! 19.f4? ♗c3! 20.bxc3 bxc3 21.♗xc3 ♗a3#. **19...♗a5!! 20.f4 ♗xa2 21.f5 ♗c5!** This once again underlines the exceptional piece dynamics involved in Kasparov's plans. **22.fxe6 ♗g7 23.exf7+ ♖xf7 24.♗xd5+** Played under the influence of imminent time trouble perhaps. In Kasparov's view 24.♗f2+! ♖g8 25.♗f5! ♗xd4 26.♗g6+ ♗g7 27.♖e8+ ♖xe8 28.♗xe8+ ♖h7 29.♗h5+ draws with perpetual check.

The further course of the game, though still very thrilling, in fact falls outside of the theme of this section, so we include it with minimal commentary.

24...♗xd5 25.♖e7+ ♖g8 26.♖xg7+ ♖xg7 27.♗c3 bxc3 28.♗f5+ ♖f7 29.♗xd5+ ♗xd5 30.♗d6+ ♖g6 31.♗xc8 ♖xg5 32.♗b6 ♗e6 33.bxc3 ♖xg4 34.♖b2 ♖f4 35.♖a3 a5 36.♗a4 ♗e4? (36...♗d7! winning) **37.♗b2! ♗xc3 38.♗d3+ ♖e3 39.♗c5 ♗f5 40.♖b2 ♗d5 41.♗b7 a4 42.c4 ♗b6 43.♗d6 ♗d3 44.c5 ♗d5 45.♖a3 ♗c2 46.♗b5 ♗e7 47.♗a7??** (47.♗c3 is a draw!) **♖d4 48.c6 ♗d5 49.♗b5+ ♖c5 50.c7 ♗f5! 0-1.**

7. THE BASIC VARIATION

The next method – establishing the basic variation – defines the “hub,” around which the whole analysis takes place. In the course of analysis the chessplayer strives to check, above all, what in his opinion are the most logical continuations for both sides. Thus, his attention centers on some basic variations, on whose evaluations the assessment of the entire idea, game plan or move often depends.

In the game just quoted, the basic variation was **13...g5 14.h×g5 h×g5 15.e×d5 ♘×d5 16.♙×g5 ♖b6!** It was on this that Kasparov's entire further plan of active play rested. No doubt there too the subsequent theoretical debates about the 13...g5 variation will be waged.

A player's preference for a certain game plan or move can stem from his overall style of play. Hence, during analysis of their own games chessplayers ought to turn their attention to whether mistakes in critical positions arise from a limitation in style. Inconsistencies may exist. For example, someone prefers to play very safe, quiet positions; that is to say, he eliminates from his considerations options that are aggressive – and winning. One should also investigate disharmony between one's preferred plans, and one's opening repertoire. For example, someone may like to play with his knights in closed positions, but in many openings he gets a pair of bishops, which he does not know how to handle. Such examples could be multiplied many times over. The reader should carry out deep, independent analysis.

8. ANTICIPATION

Interpreting individual fragments of protocols of thinking aloud, de Groot draws attention to the *phenomenon of anticipation* as the foreseeing of what could happen on the chessboard and how the analyzed position will be ultimately assessed.

Anticipation can relate to, among other things:

- the problem's scale of difficulty (e.g. "It will be hard to calculate everything.");
- foreseeing whether the problem will be solvable (e.g. "Will there be mate or not? I think there will!");
- strategy or the direction of further investigation (e.g. "It's necessary to attack!").

According to de Groot, an anticipation is a statement in which the testee speaks with certain restrictions about the (expected) nature of the problem's solution, or of the problem that is only now beginning to be defined.

Here are examples of the characteristic signs that a chessplayer is performing anticipation. "I feel that," "I have the impression that," "It seems."

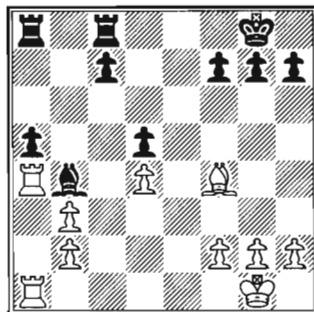
Words like “presumably,” and “probably,” reflect a player’s uncertainty about his judgements.

Anticipations occur right from the start of the player’s task, at the moment he tries to formulate the problem. However, they can occur at any moment of the solving process. After the initial problem-formulation phase, the anticipated features of the solution are often already clearly defined, but sometimes are still only provisional and hypothetical. Typically, *the higher the standard of play shown by a chessplayer, the more reliable are his anticipations*. Obviously, in the further course of thought, under the influence of new information, the chessplayer will check the value of these anticipations (and will also check the value of his plans, possible moves, preferences, and expectations).

The omnipresence of anticipation in chessplayers’ thought processes is a phenomenon especially worthy of interest; de Groot considers that every operation carried out in a chessplayer’s mind has as its aim the ascertainment of whether an earlier anticipation was correct or not. In the protocols of thinking aloud it was possible to distinguish many anticipations of a qualitative character. Familiarity with them could be useful in training, or during thinking in a chess game. If the player knows many kinds of anticipation, he can consciously and systematically introduce them while solving problems at the board. The awareness of many possible anticipations could help him increase his elasticity and organization of thought.

Let us start with an example from a game.

Tuk-Asenova, Lublin, 1969



Training #8 White to move.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

Pay attention to your thought processes themselves. You could even record your “out-loud thoughts” on audio tape.

Let us list quasi-alphabetically, closely after de Groot [*T&C*, p. 448], the basic anticipations possible in the given position, along with examples. The specific anticipations are of the:

- 1) Difficulty of problem.
- 2) (Form of) final argument (solution).
- 3) Various characteristics of the goal-as-attained.
- 4) Various solution attributes (properties).
- 5) (Specific) results or outcomes.
- 6) Objectively best move: favorite.
- 7) (Objective) board problem.
- 8) (Objective) feasible moves and plans.
- 9) (Objective) demonstrable argumentation.
- 10) (Objective) dynamic core problem.
- 11) (Objective) solvability.
- 12) (Objective) value: expectancy.
- 13) Degree of satisfaction.
- 14) Possibility of improvement.
- 15) Reliability of evaluation or expectancy.
- 16) Risk involved.
- 17) Urgency (to proceed actively).

Here are the concrete examples.

- 1) “It will be necessary to calculate a little. That is no great problem for me.” Right from the start the player foresees whether the problem will be difficult or not, foresees the degree of difficulty.
- 2) “There is either a combination to deflect a piece from the back rank and mate there, or some quiet move. Yes. The eighth rank is weakened; a solution has to be sought involving that.” The player arranges feasible moves into alternative groups, or else weighs one move against several others; she expresses a preference towards some move or group of moves. She expects that move, or group of moves, to be the most important at the final justification of selecting one move rather than another. Looking at the position from the starting point, the player is already anticipating the basis for her final justification of one move over another.
- 3) “There ought to be a mate on the back rank, with a deflection of the heavy pieces.” In chess literature we then speak of the “combination’s theme.”

- 4) "One must act quickly so that she does not have time to open a gate for the king."
- 5) "If she takes the offered piece, then I deliver mate on the back rank."
- 6) "This will certainly be a deflecting move."
- 7) "So, I have a problem: How do I deflect the heavy pieces from the defense of the eighth rank?"
- 8) "The following moves come into consideration: 1.♙xc7, 1.h3, 1.♖f1, for example."
- 9) "Only those moves now come into consideration that require instantaneous reaction on the opponent's part. There will either be mate, or there will always be some defense for Black. I will clear this up and choose between a combination and a quieter move."
- 10) "One has to hurry to execute a combination, for in a moment it will be too late if the king has somewhere to escape. So, first of all I will calculate deflecting moves, with sacrifices, and only later will I weigh other quieter continuations."
- 11) "It can all be worked out in the available time."
- 12) "I probably have a won game."
- 13) "Right. If I find the final combination, this will be a little pearl. It will get into print!"
- 14) "Just in case, I will still be able to check all the side variations."
- 15) "Unfortunately, I shall have to calculate exceptionally accurately, because I am giving material away! And there will either be mate on the back rank, or I will not have the advantage – and it will be a draw."
- 16) "I risk a lot if I overlook something. I could also play quietly, but then it would be a draw."
- 17) "I must play actively."

You can now compare for yourself your own thought processes, particularly the anticipations you used, with the possibilities above. It is worth it! Intuition *can* be developed.

It is high time to state how the game itself continued. 1.♙xc7?? ♚xc7 2.♚xb4 This was what White had been counting on. However, a surprise was in store. 2...♗ac8! 0-1. While anticipating, it is worth recalling the old saying, *who diggeth a pit under other people's feet, shall fall therein.*

9. PROGRESSIVE DEEPENING

In his tests and researches, de Groot noticed that among the world's lead-

ing chessplayers, two inter-related tendencies dominated the thought process. Firstly, there appears a general striving to prove the rightness of the move choice, which is especially noticeable in the later phases of solving. Secondly, conspicuous is an inclination to a progressive deepening and extending of analysis. Ideas and variations that previously were only briefly noted, are now subject to precise checking with the help of this method. The player considers more possibilities, tries during analysis to strengthen both sides' play, and tries to examine variations as far ahead as possible.

The phenomenon of progressive deepening occurs chiefly when the testee is solving problems of high complexity. Plans, ideas, or even particular moves, are again and again subjected to successive checking. Variations are examined ever more deeply; ever new possibilities are examined for both sides. The gradual deepening of the problem, apparent in the majority of protocols, develops through four phases. Every protocol can be examined from the point of view of progressive deepening and, according to de Groot, these same four phases can be discerned in nearly every one of them. Here are brief descriptions.

The First Phase of Orientation – Before anything else, the chessplayer carries out a general reconnaissance of the possible directions of the game, particular moves and their consequences.

The Phase of Exploration – The analyses are neither deep nor very branched; nor do they lead to definite conclusions, but rather to initial evaluations. And they always aim at establishing a concrete plan of how to proceed in the next phase, when the “really serious analysis” will take place.

The Phase of Investigation – In this phase more systematic investigations, directed at finding a concrete aim, are carried out. Most often, the investigations take place in connection with analysis “pro” or “con” a preferred move or plan. Analyses are widened and deepened. Their aim is to examine the rightness of the preferred move or plan, and to reach definite conclusions. If this examination does not pay off (e.g. when the player finally accepts that the nice-looking sacrifice or defensive maneuver he wanted to play is in the end unsound), a change of preference can ensue. There will probably be a crisis of expectations, which would initiate a new phase of deeper examinations. The third phase, therefore, can be broken down into two or more further phases of progressive deepening.

ing. At the end there finally emerges the ultimately preferred move that the testee intends to play on the board.

The Final Phase of Proof (Demonstration) – This comprises a short recapitulation of the earlier phases. The chessplayer may also thoroughly re-check several of the variations that are crucial to the final argument in favor of a certain move instead of another. At the time when the player makes his move on the board, he is subjectively convinced – in so far as that is possible in the given situation – that it is the best move, or at least no worse than the other possibilities. In the last phase the player strives to submit “material evidence,” so to speak, that he took the right decision, and that is where this phase gets its name.

In working on your own chess thinking, or in working with that of juniors, it is worth developing this phase-like procedure in the solving of problems. It would be good to form work habits based on the systematic organization of successive procedures.

We shall take a look at an example from a protocol of thinking aloud; but first here is how the game started.

Wind–de Groot, Utrecht, 1935

1.e4 e5 2.♟f3 d5 3.e×d5 e4 The modern line of the Elephant Gambit is 3...♞d6. A more recent example continued 4.♞b5+!? c6 5.d×c6 b×c6 6.♞c4 e4 7.♞e2 ♟f6 8.d3 0-0 9.d×e4 ♟×e4 10.0-0 ♞e8 11.♞e3 ♞g4 12.♟bd2? ♟×d2 13.♞×d2 ♞×f3 14.g×f3 ♞×h2+ 15.♞×h2 ♞h4+ and Black went on to win (Tr. Cox–Hebden, Walsall rapidplay, 2000).

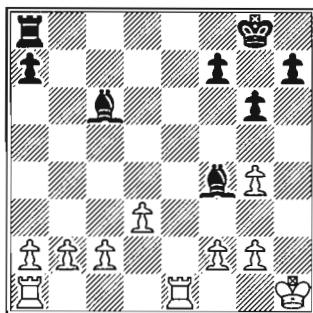
4.♞b5+?! White should play the well-known 4.♞e2 and 5.d3. **4...c6 5.d×c6 b×c6 6.♞a4 e×f3 7.♞×f3 ♟f6 8.0-0 ♞e7 9.♞×c6+ ♟×c6 10.♞×c6+ ♞d7 11.♞f3 0-0 12.d3 ♞c7 13.♟c3 ♞d6 14.h3 ♞c6 15.♞e2 ♞fe8 16.♞d2 ♟h5** Instead of 16...♞b7! 17.f3 ♞b6+ 18.d4 ♞e5 19.♟e2 ♞b5, Black lets White off the hook in a slightly messy situation.

17.♞g5 ♞h2+ 18.♞h1 ♞e5 19.♞h4 ♞f5 20.♟e4 ♞g3 21.♞g4 ♞e5? 22.♞e3 ♞f4 23.♞d4 ♞×d4 24.♞×f5 g6 25.♞c5 ♞d7 26.♞×h5!? Drastically transforming the scene. Presumably White reckoned that the removal of queens and knights was worth the price of his

pawn structure, and that the overall picture would be better than it was.

The alternative explanation is the psychological error of “I played it because I saw it.” (Of course whether a move turns out to be a game error depends on the position on the board, not to mention the opponent’s responses.) A player calculates a certain variation several moves deep, feels “in control” of events, realizes that the outcome is not particularly good for him – yet plays the line anyway. He feels so pleasantly secure in his foresight of the move sequence that he overrides or conveniently distrusts his own assessment of the resultant positions. He half-expects that his opponent will go slightly wrong (in the present case that Black will miss 26...Bxe4), or that something pleasant will just happen to turn up. The error is usually associated with longish forcing lines. Many weaker players, pleased with themselves that they have seen further ahead than usual, and flattering themselves that they have seen further ahead than their opponents, willingly go down such lines hoping for the best.

26...♙×e4! 27.♖g4 ♜×g4 28.h×g4 ♚c6 29.♞fe1



Training #9 Black to move.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

Here, in place of our own analysis, we give a version of one of de Groot’s original protocols dating from 1939, as translated from the Dutch and published in *Thought and Choice* [T&C, pp. 101-102, 424-425]. As with many such transcripts, the content can sometimes be slightly disjointed and the meaning not always immediately clear. NB: We have, in any case, freely adapted the chess notation to conform to the needs of the present book.

The subject was Nico Cortlever (1915-1995; he became an IM in 1950). Cortlever “was of the opinion that thinking aloud markedly slowed down his thinking”; nevertheless, “he felt that his protocols gave a rather good, representative picture of his actual thinking” [T&C, p. 84], and de Groot considered him to be one of the subjects who “verbalize easily” [T&C, p. 380]. He had 15 minutes to consider the position from Black’s point of view; what follows, then, are the thoughts he voiced during that time. (He had begun by counting the pawns.)

[I] Difficult: this is my first impression. The second is that by actual numbers I should be badly off, but it is a pleasant position. I can do a whole lot of things – as usual. Get my rook into it, at the pawns. Nowhere for his rook to stand on the e-file, except on my e7. And that I can always prevent with ...♠f8. 29...♠f8 is impossible [?]. If I, for example, play 29...♗b8, he 30.♗ab1 ♕d5 – then he can still get in. I might try to block his pawns; then I can’t win, but that won’t be too easy anyway. Also seek something to do along the h-file: ...g5, ...h5, ...♠g7, ...♗h8. Then he must play something like f3. Exchange of rooks in general not good; must avoid that.

[II] The first move under consideration is 29...♠f8 to keep the rook out. Then 30.♗e2 and double them; ... doesn’t help matters either then. But if he then advances with his pawns: c4, b4, or like that; then hard to stop them. Immediately, that doesn’t go, after 30.c4 then ...♗d8 and ...♗d5 follow and I blockade him.

29...h5, I don’t like the idea of that very well.

If immediately 29...♗b8, then 30.♗e7 is annoying.

I should play 29...♠f8, or perhaps 29...♕g5.

Oh, no, 29...♗b8 30.♗e7 doesn’t go because of 30...♗x2. Consequently he must reply 30.♗ab1 or 30.b3. Then perhaps 30...♕d5; but then comes 31.c4, so that is not so good. I do not stand well after all. He can always play c3. Can I prevent that?

29...♗b8 30.♗ab1 and now ...♕d2-c3. Or perhaps 29...♗b8 and then 30...♠f8; then he still cannot play b4, so maybe 29...♗b8 30.♗ab1 ♠f8 31.c3. No, doesn’t suit me though.

[III] *Maybe still something better; still on the king's wing:*

29...♗g5 or something like that, 30.♞e5 f6 – no, a touch of fantasy.

29...h5 immediately, 30.g×h5 g×h5 or 30...♝g7; no, then 31.♝g1 – not worth much either.

29...♞d8 and 30...♞d5 – also nothing.

29...♞b8 30.♞ab1 h5 31.g×h5 then 31...♞b5 32.♝g1 – or 32.h×g6 – ...♞×h5 and 33...♞h2. Maybe not so crazy.

[IV] 29...♞b8 30.♞ab1 h5 31.g×h5 – 31.f3 is not good, then the rook comes to g5 [via b5] – therefore 31.g×h5 ♞b5 32.h×g6. Am I doing anything to him then? I can also immediately play 30...♞b5 and then ...h5.

The bishop, can that do anything? 29...♗d2 (30.♞e2) ...♗b4. A little slow. And the bishops are well placed. Yes, a little slow.

29...a5 – but that is nonsense. The rook must do something; other moves are a bit too passive in that position. 29...a5 30.♞e7 ♞e8 – rook exchange; no, that is nothing.

Yes, I begin with 29...♞b8.

29...♞b8 was also Max Euwe's choice when he was tested by de Groot. Were he in time trouble, Euwe would have played that move without examining the consequences too deeply.

The protocol printed above can be analyzed in terms of progressive deepening; we would then obtain approximately the following division [T&C, pp. 266-267].

Phase of Orientation – I
Phase of Exploration – II
Phase of Investigation – III
Phase of Justification – IV

Note that it is not always possible to draw precise boundaries between the phases.

For the record, here is how the game actually finished (from the previous diagram).

29...♖b8 30.b3 Later we shall see Cortlever's thinking about the position after 30.♖b1.

30...♖b5 31.♖e7?! A waste of time. White should set his c and d-pawns in motion.

31...♖g5 32.f3 32.♖xa7? loses the rook to 32...♖xg4 33.f3 ♖h4+ 34.♖g1 ♖e3+.

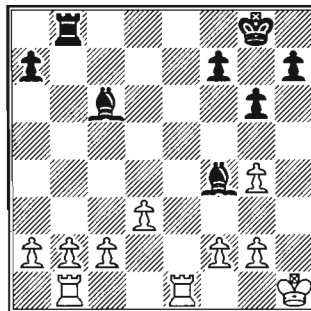
32...h5 33.gxh5 33.♖xa7? hxg4 34.♖a6?? walks into a forced mate: 34...♖h5+ 35.♖g1 ♖e3+ 36.♖f1 gxh3, etc.

33...♖xh5+ 34.♖g1 ♖d6 35.♖ee1 ♖c5+ 36.♖f1 ♖h1+ 37.♖e2 ♖h2 38.♖g1 ♖xg1 39.♖xg1 ♖f8 40.d4 ♖e7 41.c4 g5 42.♖e1 ♖d6 43.♖f2 f6 44.b4 ♖h4 45.♖d1 ♖d7 46.b5 ♖f5 47.♖d2 ♖h1 48.♖b2 ♖b1!? Did Black think he was increasing his chances of victory, or else decreasing his chances of defeat?

49.♖d2?? The consequences of removing the rooks would probably be drawish, though White could get very lucky, e.g. 49.♖xb1 ♖xb1 50.c5+ ♖d5 51.a4 ♖xd4?? 52.b6 winning.

49...♖b4 50.c5+ ♖d5 51.b6 axb6 52.cxb6 ♖xb6 0-1.

Following the protocol above, Cortlever was asked by de Groot to consider the new position after 29...♖b8 30.♖ab1 (the move envisaged by Cortlever, not 30.b3 as occurred in the game). He continued to voice his thoughts, but on this occasion for just 10 minutes. The transcript is reproduced below. (As before, the chess notation has been freely adapted to conform to the needs of the present book.)



Black to move.

Let's have a look:

30...♖d2 31.♖e7 ♖c3 32.b3 ♖b4. ... Ah, no, 31.♖e7 is bad.

30...h5, what then? Or 30...♖b5. Then 31.♗e7 h5 32.g×h5 ♗×h5+ 33.♙g1 ♗h2+ and 34...♗d6. Then 35.♗be1 or something like that. If I do nothing, I have the idea that I am gradually going to lose. To hold back the pawns doesn't work so well. No, I must do something on the king's wing.

Perhaps to play 30...♗b4 – doesn't seem so strong to me. The bishop on f4 must then first move. No, that stands well.

No, look again: 30...♗b5 31.c4; then 31...♗g5 and I win a pawn; unless 32.f3. Then 33...h5 34.g×h5 ♗×h5+ and advance with the g-pawn – not so bad.

30...♗b5 31.♗e7 h5 32.g×h5 ♗×h5+ 33.♙g1 ♗h2 34.f3 g5 35.♗xa7 g4 36.♗f1 g3 threatens mate! Not unpleasant. If he now defends the pawn instead of 32.g×h5, thus 32.f3, then take twice on g4 and ♗g5.

30...♗b5. Then also to offer a pawn at g4, in order to stop the attack (after ...h5) – possible. But now I can take with the rook; after f3 I can the move the h-pawn forward. That also gives good chances.

Yes, I should play 30...♗b5.

In the protocols and elsewhere it was possible to observe further methods, which we shall mention below.

10. CHECKING

“When a result [of analysis] is implausibly favorable or unfavorable, *checking* (striving for *correction*) of counter-play or own-play, respectively, follows.” [T&C, p. 289.] If the evaluation of a game suddenly and unexpectedly appears to alter significantly after a single move, such *checking* will establish whether this is as a result of one side's mistake, or of the other side (or the observer) failing to see deeply enough into the position.

Here is a short and sweet example. **1.d4 f5 2.♗g5 h6 3.♗h4** “Surely, this can't be right! White loses a piece so soon in a standard line... Oh, I see now.” **3...g5 4.e4!**

11. SECURING

The player consciously notes, internally or in words, that he has achieved some concrete aims, or provisional results, which are trustworthy. For instance, “With extra material, I ought to win”; “With a bishop on g2, I won’t get mated.” Such thoughts can give the player a sense of command over the situation, and the feeling of security that he now has solid conclusions on which to lean. It seems that emotional feelings of safety and control are important in cognitive processes.

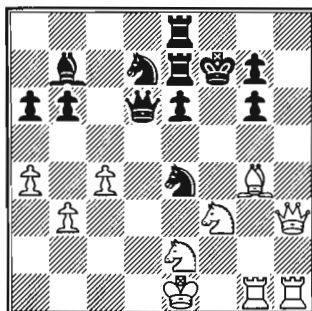
Common examples of *securing* would include the relief and accomplishment, as verbalized in thought, felt after:

- finally managing to castle (or connect the rooks) in a sharp, unfamiliar opening line;
- at least regaining the material following a speculative gambit or sacrifice;
- activating or exchanging a problem piece (such as Black’s light-squared bishop in the French Defense);
- depriving the opponent of the bishop-pair in an open position;
- securely blockading a passed or isolated pawn with a knight.

12. CONFLICT ANALYSIS

This is yet another method of critically checking previous analysis. This time, however, the player searches for the *reasons* for the making of mistakes in the evaluation of variations, plans, etc. The “conflict” of the title arises when a supposedly attainable objective is proving, for the moment, to be frustratingly out of reach. The player then tries to discover why this is, and precisely where and what the stumbling-block is. Here is an illustration.

Przewoznik–Brustkern, Berlin, 1999



It is White to play. Any “normal” continuation would do little to disprove that he stands worse. So, he rightly concludes that the most appropriate time for tactical strikes has arrived, now that the black king is insufficiently shielded on the kingside.

1. ♖h5!! ♗f8 1...g×h5 2. ♜×h5+ ♕f8 3. ♜h8+ ♕f7 4. ♜×g7#, or 1...♜b4+ 2. ♕f1 when Black can do nothing to White’s king. **2. ♞×g6!** Time is what matters! Discovered checks, usually dangerous, are threatened. And after the recapture in a moment on g6, Black will have no time for counter-action, since everything will take place with check.

2... ♗×g6 3. ♖×g6+ ♕×g6 4. ♜h5+ ♕f6 While preparing the whole combination, White long searched for moves that force the play in this position. After all, the securest course after the investment of material in such a position is to finish the game with a series of checks ending in mate. 5. ♜h4+ draws, but actual mate could not be seen from afar, and White was not going to be satisfied with anything less than the full point. Then the method of conflict analysis came to White’s assistance. The internal dialogue went something like this: “What’s going on? There *has* to be mate or real threat of mate here. Aha! I keep looking for moves that check the black king, yet perhaps there is some sort of quiet move here.” And indeed there was.

5. ♞f1!? As already mentioned, White was not interested in a draw. **5... ♗g3??** If 5...♜b4+ 6. ♗d2+ winning. Chances are preserved by 5...♞d7, but then White would achieve a won endgame after 6. ♗e5+ ♕e7 7. ♞f7+ ♕d8 8. ♞×d7+ ♜×d7 9. ♗×d7 ♕×d7 10. ♜e5.

However, Black has 5...♞c7!!.. When we consider 6. ♗e5+ ♕e7 7. ♞f7+ ♕d8, we see that compared to the 5...♞d7 line, 8. ♞×d7+ is no longer possible, and it is Black who threatens terrible checks on d2. White has to accept the returned material (after 5...♞c7) by continuing 6. ♜×e8 ♜b4+ 7. ♗d2+ ♕e5 with Black the superior.

6. ♗e5+ 1-0. Black resigned because of 6...♗f1 7. ♗g4#, and 6...♗f5 7. ♗g4#.

The key moment, crucial to initiating the combination, was the decision to exclude checking moves from the search field, and instead to concentrate on possible quiet moves preparing or threatening forced mate. The entire previous manner of thought had to be re-questioned.

In some chess manuals it is not recommended to repeat for a second and third time the same branches of the analysis tree, but practice confirms

the opposite. Even strong and experienced chessplayers repeat variations in their minds – this is important in order to arrive at progressive deepening, at a deepening understanding of the position. Another benefit of this repeated analyzing of variations is affirmation that everything is indeed under control. It gives a thoroughly pleasant feeling of security. Research bears out the fact that many people like to solve problems in this manner – they do not follow the shortest path in their analysis, but prefer to recheck several times.

13. TRYING OUT

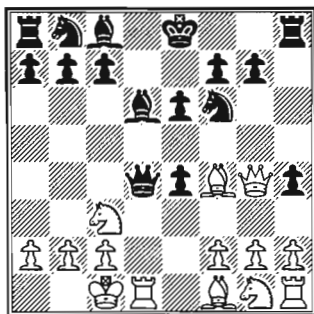
Trying out is the empirical investigation of variations, certain hypotheses, ideas, plans, or individual moves. In de Groot's opinion, this method is particularly important in chess. It fulfills several functions:

- It may directly discover a problem's solution;
- It enables the player to gain more information about a problem;
- It helps in the discovery of new means of solving.

Let us see an example. The simplest and most frequent is checking whether the given move leads to a win or a loss.

Moldojarov–Ehlvest, Riga, 1977

1.e4 e6 2.d4 d5 3.♘c3 ♚b4 4.♙d2 d×e4 5.♗g4 ♜×d4 6.0-0-0 h5 7.♗g3 ♙d6 8.♙f4 h4 9.♗g4 ♜f6



Black has already achieved a splendid position. For example 10.♗g5 ♙×f4+ 11.♗×f4 ♜c5 12.♘×e4 ♘×e4 13.♗×e4 ♘c6 14.♜f3 ♙d7.

Meanwhile, White not only shows poor knowledge of the opening, but in addition now unconcernedly takes on g7, surely without much checking.

10.♗×g7?? A typical mistake, which others have also since fallen for.

White doubtless counted only on 10...♔xf4+ 11.♖b1 ♜g8 12.♗xg8+ ♘xg8 13.♞xd4, without additionally checking other branches. **10...♔xf4+ 11.♖b1 ♜h7! 0-1.** The rook cannot be taken with check.

14. CLARIFICATION

This method is very similar to the previous one. If the results of examining some move or variation are unclear, and the player has difficulty with the assessment, then there emerges the natural tendency to try to clear up and explain these obscurities.

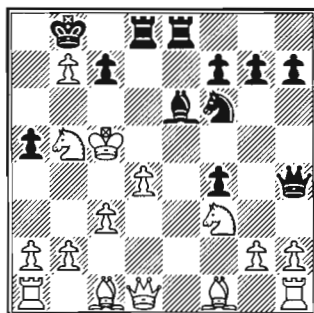
15. STRENGTHENING

This is one of the most frequent methods of chess thinking. Strengthening depends on this: if the results (end positions) of calculating variations are disadvantageous, then the analysis must undergo widening; different possibilities, not previously taken into account, are offered up for consideration. In practice, every game contains possibilities for strengthening the given variations. Let us have a look at one (apocryphal?) example.

R. Steel–NN, Calcutta, 1886

1.e4 e5 2.♗c3 ♗c6 3.f4 exf4 4.d4 ♖h4+ 5.♞e2 d5 6.exd5 ♔g4+ 7.♗f3 0-0-0 8.dxc6 ♔c5 At this point Bilguer gives 8...♗f6 9.♖e1 ♔xf3+ 10.gxf3 ♜e8+ 11.♗e4 ♖h5 12.♞f2 ♖h4+, with dynamic equality.

9.cxb7+ Recommended nowadays is 9.♖e1 ♖h5! (9...♜e8+ 10.♞d2!) 10.cxb7+ ♖b8 11.♞d2 ♔xf3 12.gxf3 ♔xd4 13.♔d3 with great complications all the way. **9...♖b8 10.♗b5 ♗f6** It is also possible to fight to maintain the attack like so: 10...♔xf3+ 11.gxf3 ♗f6. **11.c3 ♜he8+ 12.♞d3 ♔f5+ 13.♞c4! ♔e6+! 14.♞xc5 a5!**



Training #10 White to play.

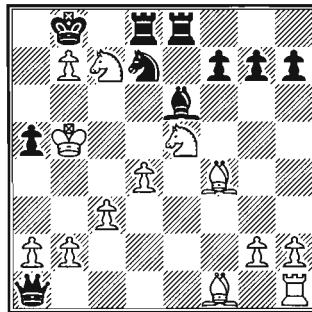
(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

It seems as if a brilliancy prize is in the offing, but for whom? Black has up his sleeve a couple of mates for the white wanderer, e.g. 15. ♖xh4?? ♖e4+ 16. ♖c6 ♖d5#; also possible is 15... ♖d7+ 16. ♖c6 ♖d5+ 17. ♖xd5 ♖b6+! 18. ♖c5 ♖d5+ 19. ♖c6 ♖e6+ 20. ♖d6 ♖exd6#. Perhaps you quickly discovered these mates, and perhaps then consciously applied the method of strengthening. Where? Right here.

15. ♖xc7! Make way for His Royal Highness! And make trouble for the enemy too. 15... ♖xc7? 16. ♖xh4 ♖d5+ 17. ♖c4 ♖xd4+ 18. ♖xd4 ♖d8+ 19. ♖c5 ♖xd1 20. ♖xf4+ and White wins.

15... ♖h5+ 16. ♖e5 ♖d7+! 16... ♖xd1 would be premature because of 17. ♖c6+ ♖xc7 18. ♖xf4+, or 17... ♖xb7 18. ♖a6+ winning.

17. ♖b5 ♖xd1 18. ♖xf4 Nothing much was gained by 18. ♖c6+? ♖xb7 19. ♖xa5+ ♖c8-+. White should in fact play 18. ♖xd7+! when the least evil, though still bad for Black, is 18... ♖xb7 19. ♖c5+ ♖a7 (19... ♖xc7 20. ♖xf4+) 20. ♖xe8 ♖xe8 21. ♖xa5. **18... ♖xa1**



19. ♖a6!! This looks quite fantastical. It would be a pretty mate after 20. ♖c6#. Also looking interesting is 19... ♖d5 20. ♖xd7+ ♖xd7 21. ♖e6+! ♖d6+ 22. ♖xd6#, or 19... ♖xc7 20. ♖d7+, though not 20. ♖b5?? ♖a8+.

19... ♖e5 20. ♖xe8 f6 Instead of the pawn, Black should defend the knight with something expendable – like his only remaining rook: 20... ♖d5!.

21.d×e5 f5 22.♙e3 ♖×e8 23.♙b5! The course of this game is constant testimony to the fact that the king is indeed the most important piece in chess. **23...♗×h1** Or **23...♗×b2** **24.♙a7+ ♖c7** **25.♙c5** with decisive threats. Black consistently consumes material.

24.♙a7+! ♖c7 25.♙c5 **26.♙d6+** is threatened. No help is **25...♗d1** because of **26.♖a7!** **25...♞d8??** But this does not help either! Undoubtedly the biggest mistake in this fascinating game. The game should have ended as a draw with the line **25...♞c8!** (or **25...♙c8!**) **26.♙b6+ ♖b8** **27.♙a7+ ♖c7** **28.♙b6+**.

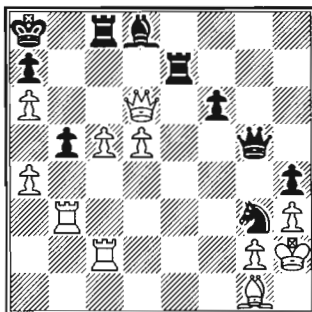
26.♖a7!! Now Black is forced to resign because of **27.♙b6#**.

Among the checks and mates that you usually perceive during such a bumpy ride, search methodically for a strengthening of the protection for your king. If you apply Steinitz’s notion that the king is a strong piece right from the beginning of play, then remember not to leave your king feeling entirely isolated, with no support from pieces or pawns.

16. CONFIRMATION

If the outcome of calculating certain variations is favorable, this becomes recorded in the chessplayer’s mind; these variations receive their own kind of positive “label,” that of approval. This method proves itself particularly well in complicated positions, in which it is possible to get lost in a thicket of variations. It is then beneficial to imagine visually the various branches and their end assessments. (Though perhaps it is strong players with a well-developed pictorial imagination who can make best use of this method.) Let us see a very vivid example.

Alekhine–Hofmeister, St. Petersburg, 1917



White to move.

Black has just played ...b6-b5 (instead of ...♖e2!), so *en passant* is not possible.

1.a×b5 1.♖×b5 takes the rook's eye off the knight, permitting 1...♗f1+ 2.♖h1 ♗g3+ 3.♖h2 ♗f1+ ½-½. **1...♗e4** Other moves would not help Black either. The method of confirmation, awarding sub-variations a positive end-evaluation, could look as follows.

a) 1...♖e2 2.♖×e2 ♗×e2 3.b6! – winning.

b) 1...♗f1+ 2.♖h1 ♗g3+ 3.♖×g3 ♗×g3 4.b6! and now:

b1) 4...a×b6 5.c×b6 ♗×d6 6.♖×c8+ ♗b8 7.b7+ ♖×b7 8.a×b7+ ♗×b7 9.♖×b8+ ♗×b8 10.♗f2 – winning.

b2) 4...♗×d6 5.c×d6 ♖×c2 6.d×e7 ♗×e7 7.b7+ ♗b8 8.♗h2+ ♖c7 9.♗f4! ♗c5 10.g3 h×g3 11.h4 ♗d4 12.♗×c7+ ♗×c7 13.d6+ ♗b8 14.d7 ♗b6 15.h5 – winning.

2.b6! ♗×d6 It seems as if Black has a defensive resource: 2...a×b6 3.c×b6 ♗×g2+! However, following 4.♖×g2 ♗×d6 5.b7+! ♗×b7 6.a×b7+ ♖×b7 7.♖a2+ ♗b8 8.♗a7+ ♗a8 9.♖ba3!, it is still White who has the upper hand.

3.c×d6 ♖ec7 3...♗c7 4.b7+ ♗b8 5.b×c8=♗+ ♗×c8 6.♖h1!. **4.b7+ ♗b8**
5.d7!! ♗g3+ 6.♖h1 1-0.

Since a competitor's playing strength depends to a large degree on his skill in calculating variations, it is certainly worth adopting supportive methods. One such is the quoted method of awarding positive end evaluations (as here in *confirmation*) or negative end evaluations (as perhaps prior to *strengthening*).

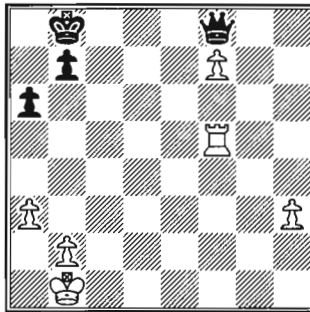
17. NON-EXECUTION OF MOVES

In the course of analysis a chessplayer often departs from the principle of making alternative moves for White and Black. That occurs, for instance, when he asks what happens next if he does not play anything, or asks what happens if his opponent plays nothing; de Groot calls this the *no-move principle* [T&C, p. 289].

Dubinín–Aronin, Leningrad, 1947

1.e4 ♗f6 2.e5 ♗d5 3.c4 ♗b6 4.c5 ♗d5 5.♗c4 c6 6.♗c3 ♗×c3
7.d×c3 d5 8.c×d6 e×d6 9.♗f3 d5 10.♗d3 ♗g4 11.h3 ♗h5

12. ♖f4 ♘d7 13. ♜e2 ♘c5 14. ♙c2 ♘e6 15. ♙e3 ♙e7 16. 0-0-0
 ♜a5 17. ♝b1 0-0-0 18. g4 ♙g6 19. ♙f5 ♝b8 20. ♘d4 ♘×d4
 21. c×d4 c5 22. d×c5 ♙×c5 23. ♙d4 ♞he8 24. f4 ♞e6 25. ♜e3 ♞c6
 26. ♙×g6 h×g6 27. f5 ♙×d4 28. ♞×d4 ♜c5 29. ♜d2 g×f5 30. g×f5
 ♜b5 31. ♞d1 ♞c5 32. ♜f4 ♝a8 33. ♜f3 ♜c6 34. a3 a6 35. ♜g2
 g6 36. e6 g×f5 37. e×f7 ♞f8 (37... ♜e6) 38. ♜g7 ♜d6 39. ♞×d5 ♞×d5
 40. ♞×d5 ♜e7 41. ♜×f8+ ♜×f8 42. ♞×f5 ♝b8



White to move.

At this moment Black, awaiting his opponent's reply, could apply the method of non-execution of moves. "Now what will happen if I just sit and wait?" The reply would certainly be swift. Applying the method of calculating only one side's moves (in this case the opponent's) we get h3-h4-h5-h6-h7-h8=♜ and White wins.

So, something has to be done – as the method of non-execution of moves indicates – but unfortunately for Black nothing can save him now.

43. h4 b5 44. h5 ♝c7 45. ♞f1! a5 46. h6 b4 47. a4 ♝d7 48. h7 ♝e7
 49. ♞e1+ ♝d7 50. ♞h1! 1-0.

18. CALCULATING ONLY ONE'S OWN MOVES

This method is a variant of the preceding one. It can happen that in an endgame, for example, a chessplayer works out only his own successive moves, omitting his opponent's responses. It is also often applied during the construction of a game plan, when the chessplayer plots the arrangement of his forces. Here is a very characteristic example.

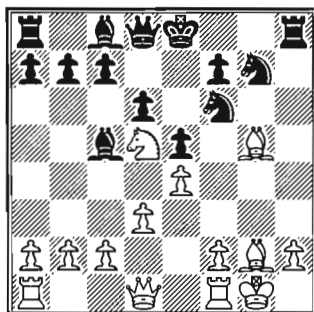
Augustin–Nunn, Moscow, 1977

1. e4 e5 2. ♘c3 ♘f6 3. g3 ♙c5 4. ♙g2 d6 5. ♘ge2 ♘c6 6. 0-0 John Nunn, in his *Secrets of Grandmaster Chess*, marks this as a dubious move.

“One of those rare occasions when early castling is inadvisable, since it gives Black a clear target to aim at.”

6...h5 7.d3 Here or earlier White should rather play the careful c3-a4 , exchanging the bishop on c5. **7...h4 8.♙g5 h×g3 9.♘×g3** A familiar image in the Vienna Game. Following a peaceful start a sharp struggle soon commences. From here White counts on the pin along the h4-d8 diagonal; Black counts on an attack.

9...♘d4 10.♘h5 ♘e6 11.♘×g7+ The turning point of the game. Other complicated possibilities are $11.\text{♘xf6+ gxf6}$ $12.\text{♙e3}$, and $11.\text{♙xf6 gxf6}$ $12.\text{♘d5}$. However, according to Nunn, they are no better than the text. **11...♘×g7 12.♘d5**



12...♘×d5! An excellent positional queen sacrifice, after which Black obtains a dangerous kingside attack. **13.♙×d8 ♘f4 14.♙g5 ♘ge6 15.♙×f4 ♘×f4 16.♖h1 ♙e6** It was possible to gain material by $16...\text{♘×g2}$ $17.\text{♖×g2 ♙h3+}$ $18.\text{♖h1 ♙×f1}$, but then the striking power of the black pieces would be dissipated. “Black’s correct plan,” says Nunn, “is simply to round up the h-pawn, thereby completely exposing the white king.”

17.♙f3 ♖h4! 18.♖g1 ♖e7 Black must put every piece to good use. He must not waste the potential power residing in the rook on a8. After all, he has to have compensation for the queen. **19.♖g2 ♘×g2 20.♙×g2 ♖ah8 21.♗d2 ♖×h2+ 22.♖g1 ♖2h4** Black need not hurry. The king will not escape: $23.\text{♖f1? ♖h1+}$ (or $23...\text{♖g8}$) $24.\text{♙×h1 ♖×h1+}$ $25.\text{♖g2 ♖×a1}$, or $23.\text{♙f3 ♖g8+}$ $24.\text{♖f1 ♖f4!}$ $25.\text{♖e2 ♙g4!}$, with a clear plus for Black in both lines.

23.♖e1 ♖g8 24.♖e3 ♙×e3 25.♗×e3 ♙h3 26.♖f1 ♙×g2+ and White resigned half a dozen moves later. (...) 0-1.

The basis for Black's success was the excellent piece coordination. Black used his forces economically. Did you see a piece of his that was unemployed? No. The f4-square was also important – minor pieces like strong bases. And maybe at a certain moment Black used the principle of calculating only one's own moves: ...♙e6, ...♞h4, ...♜e7, ...♞ah8, ...♞xh2+. (Compare Nunn's note to his 16th move.)

19. METHODOICAL DOUBT

Beware of Greeks bearing gifts. This suspicion, before the bringing of the Trojan Horse into Troy, could be the motto of this section.

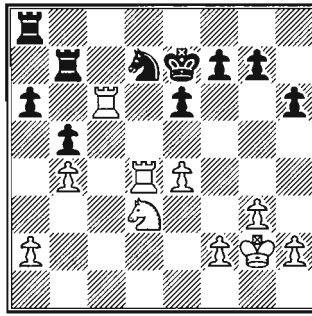
The method of methodical doubt appears in two varieties. The first is when the player “examines something despite everything,” although he knows from the start that it is worthless and that nothing good will come of it – when he includes pointless moves among a large list of candidates, for example. The second is when the player methodically casts doubt on the validity of the positive results achieved.

It is worthwhile briefly engaging methodical doubt in those situations when the opponent gives us material “for free”; when we have a won position and want to effect an “immortal” decisive combination that delivers mate with the last pawn; when we conclude the analysis of final evaluations; etc. It suffices to give oneself the short instruction: “Very well. It looks interesting. But now I shall apply methodical doubt – perhaps I contradicted myself?”. It is worth taking advantage of this method when we have a lot time for reflection.

Here are a few examples from tournament practice. First of all, let us have a look at the ending of the game below.

Schmidt–Pirc, Noordwijk, 1938

1.d4 ♟f6 2.♟f3 e6 3.c4 d5 4.♟c3 ♟bd7 5.♙g5 ♙e7 6.e3 0-0
 7.♞c2 h6 8.♙h4 c5 9.♞d1 ♞a5 10.cxd5 ♟xd5 11.♙xe7 ♟xe7
 12.♙e2 ♟f6 13.0-0 a6 14.♞a4 ♞b6 15.dxc5 ♞xc5 16.♟e4
 ♟xe4 17.♞xe4 ♟d5 18.♟e5 ♟f6 19.♞d4 ♞xd4 20.♞xd4 b5
 21.♙f3 ♞b8 22.♞c1 ♙b7 23.♙xb7 ♞xb7 24.g3 ♞a8 25.b4 ♟f8
 26.♟g2 ♟e8 27.♞c6 ♟e7 28.e4 ♟d7 29.♟d3



Training #11 Black to move.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

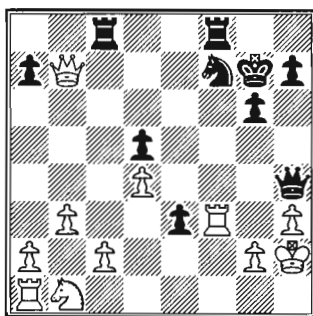
Black could now defend himself efficiently in the variation 29...♖aa7, e.g. 30.♖dd6 ♘b8! 31.♖b6 ♖x b6 32.♖x b6 ♘d7 33.♖c6 a5. However, instead of that he played for a trap.

29...♖b6? No doubt Black was counting on the following variations: 30.♖c7 ♖d6 31.♖x d6 ♗x d6 32.♖b7 ♗c6, or 30.♖x d7+ ♗x d7 31.♖x b6 ♗c7. And it was absolutely necessary to check them once again! Indeed, serious material is given away.

30.♖x d7+ ♗x d7 31.♘e5+! This was what Black had not foreseen – the interposed check radically changes the situation. If earlier he had routinely set methodical doubt to work in his mind, then perhaps it would have protected him from defeat.

Nimzowitsch–Euwe, Karlsbad, 1929

1.e3 ♘f6 2.b3 g6 3.♖b2 ♖g7 4.f4 d6 5.♖c1 0-0 6.♘f3 ♖g4
 7.♖e2 ♘c6 8.0-0 e5 9.fxe5 ♘xe5 10.d3 ♘xf3+ 11.♖xf3 ♖xf3
 12.♖xf3 d5 13.♖f1 ♘g4 14.♖xg7 ♗xg7 15.h3 ♘e5 16.♖g3 f5
 17.♖f4 ♖f6 18.d4 ♘f7 19.♖xc7 ♖ac8 (19...♖fc8 20.♖xb7?? ♖d6)
 20.♖xb7 ♖h4 21.♗h2 f4 22.♖f3 (22.♖g4) 22...fxe3



Training #12 White to move.

(As in the previous examples) perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.

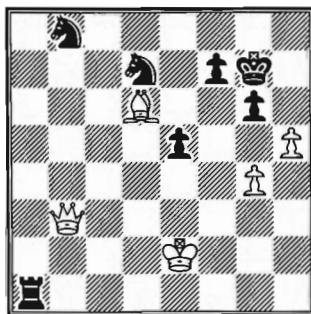
White's position is already very difficult. But he continued very cleverly.

23. ♖c3! ♜xc3? and Black had fallen into a trap. What had to be played was 23... ♗xd4 24. ♜af1 ♖e5+ 25. ♜h1 ♜c7, or 24. ♜xf7+ ♜xf7 25. ♗xc8 ♖e5+ 26. ♜g1 e2 27. ♜e1 ♜f1+ 28. ♜xf1 ♖e3+.

24. ♜af1 e2 25. ♜xf7+ ♜xf7 26. ♗xf7+ ♜h6 27. ♗f8+ and Black resigned because of 27... ♜g5 28. ♗f6+ ♜h5 29. g4+. Once again, methodical doubt, as a method applied for a few dozen seconds, might have protected Black from unpleasantness.

Kuzmin–Polugaevsky, Riga, 1975

1.e4 c5 2. ♖f3 d6 3. d4 cxd4 4. ♖xd4 ♖f6 5. ♖c3 a6 6. ♜g5 e6 7. f4 b5 8. e5 dxe5 9. fxe5 ♗c7 10. ♗e2 ♖fd7 11. 0-0-0 ♜b7 12. ♗h5 g6 13. ♗h4 ♜g7 14. ♜e7 ♗xe5 15. ♜xb5 axb5 16. ♖dxb5 g5 17. ♜xg5 0-0 18. ♜he1 ♗f5 19. ♖d6 ♗g6 20. ♖xb7 ♜xc3 21. bxc3 ♜xa2 22. ♜d3 ♖c6 23. ♜h6 ♜fa8 24. ♜g3 ♜xc2+ 25. ♜b1 ♜xc3+ 26. ♜xg6+ hxg6 27. ♜c1 ♜b8 28. ♜b2 ♜xb7 29. ♜c1 ♜xc1+ 30. ♜xc1 e5 31. ♗c4 ♜b6 32. h4 ♖f6 33. ♗c5 ♖d7 34. ♗d6 ♖cb8 35. ♗d3 ♜c6+ 36. ♜d1 ♜e6 37. g4 ♜g7 38. ♗b3 ♜f6 39. h5 ♜f1+ 40. ♜e2 ♜h1 41. ♜a3 ♜a1 42. ♜d6



Training #13 Black to move.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

Black finds himself in enormous difficulties. But he finds an interesting, hidden possibility.

42...♖a6!! 43.♙×b8? White still does not see the threat. If at that moment he had initiated methodical doubt, perhaps he would have discovered that he was not winning at all, as the opposition had prepared a fortress. And maybe he would have played something else, prolonging his chances of a win.

43...♘×b8 44.♗×b8 ♘×h5 45.♗×e5+ ♔g8 46.♗b8+ ♔g7 47.♗b2+ ♔g8 48.g×h5 ♖e6+ Black has achieved a positional draw. 49.♕f3 ♕h7 50.♕f4 ♖h6 51.♕g5 ♖e6 52.♗h2 ♖h6 53.♗f4 ♕g7 54.♗×f7+ ♕×f7 55.♕×h6 and a draw!

Methodical doubt can be included in situations when the opponent gives us something to take. This method can prove itself in chess... and life!

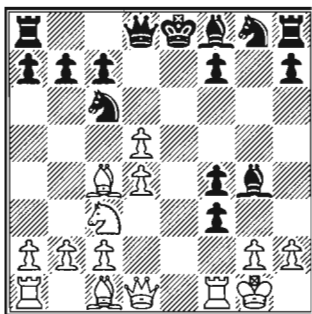
20. AIMING FOR PARTIAL LIQUIDATION OR ELIMINATION

The chessplayer, anticipating a multitude of variations to work out, tries to select the sequence that will simplify the task for him, that will make the quantity of branching in the entire analysis tree as small as possible. He could accomplish this by, for instance, first examining short variations, or those that will lead to clear evaluations.

Let us look at a sharp illustration taken from the Pierce Gambit.

1.e4 e5 2.♘c3 ♘c6 3.f4 e×f4 4.♘f3 The game leading to Training #10 saw 4.d4 ♖h4+ 5.♗e2. **4...g5 5.d4 g4 6.♙c4 g×f3 7.0-0** This is how William Timbrell Pierce's idea is realized. White has already managed to castle and bring a few pieces into the fray. Meanwhile, Black is behind in development and has lasting weaknesses in his pawn structure, chiefly the infamous f7-square, which both sides must keep an eye on in this variation.

7...d5 Theory prefers 7...♘×d4! partly because of 8.♖×d4? ♖g5 threatening ...♙f8-c5 as well as mate. On the other hand Keres' recommendation 7...♙g7 8.♙×f4 ♙×d4+ 9.♗h1 ♙×c3 10.♙×f7+ ♖×f7 11.♖d5+ ♗e7 12.e5, was answered by Graham Burgess, who pointed out that after 12...♖f8 13.♖×f3 ♖g7 14.♖×c3 ♘h6 White's sacrifices appear unjustified. **8.e×d5 ♙g4**



Training #14 White to play.

(As in the previous examples) **perform static and dynamic evaluations of the position; sum up the basic continuations, making comparative evaluations. Select the move that you would carry out in a tournament game. Justify the chosen game plan.**

Remember your thought processes. Did you apply the economical method of partial elimination, for example?

It was possible to start with a rapid consideration of those lines, as suggested by intuition, which ought not to end well for White.

a) 9.d×c6 f2+ 10.♖×f2 ♙×d1 11.c×b7 ♙g4! (But not 11...♗b8? 12.♙b5+ ♗e7 13.♙×f4 ♙g4 14.♗e1+ ♙e6 15.♙e5 f6 16.♙×c7! and White wins.)
 12.♙b5+ ♙d7 13.♘d5 ♗b8 14.♙×f4 ♖×b7 15.♖e1+ ♙e7 16.♖×e7+

♙xe7! -+. This variation is quoted by Keres.

b) 9.♖e1+ ♗ge7 10.gxf3 (10.♗e4 ♕g7 11.gxf3 ♗a5 12.♕f1 ♕h5 13.c4 ♖g8 14.♗f2 b5 15.♗c5 ♗f8 16.♕xf4 ♗xc4 and, according to Keres, Black has a big advantage.) 10...♕h3 11.♕xf4 ♖g8+ 12.♕g3 ♗a5 13.♕b5+ c6 14.♗e4! ♕g7 15.♗h1 (15.dxc6 ♙xd4+ with a large advantage to Black.) 15...♙xd5 16.c4 ♙d7 17.d5 ♗f8 18.d6 ♗f5 19.♗c5 ♗xg3+ 20.hxg3 ♙f5 with a decisive advantage to Black, Milner-Barry–Alexander, Cambridge, 1932.

c) Now the third important example, from which it emerges that White can try to force a draw. **9.♙e1+** ♕e7 10.♕xf4 ♗xd4 11.♕e5 ♗e2+ (It may look as if Black should try 11...♗xc2, but the extreme complications are not necessarily in his favor: 12.♙e4 f6 13.♙xg4 ♕c5+ 14.♗h1 ♗xa1 15.d6! is just one example.) 12.♗xe2 fx2 13.♕xe2 ♕xe2 14.♙xe2 f6 15.♖xf6! (15.♙h5+ ♗f8! 16.♖f5 h6! 17.♖af1 ♖h7 18.c4 ♙d7!; or 15.♕xf6 ♗xf6 16.♖xf6 ♙xd5! 17.♖e6 0-0-0! 18.♖xe7 ♙d4+ and in both cases Black probably has the advantage.) 15...♗xf6 16.♕xf6 ♖f8 17.♙h5+ would end in perpetual check, ½-½ Pol–Rubin, corr., 1971. What must yet be tried out in practice is the blocking 9...♗e7 (with either knight). If it fails to give Black satisfactory results, then we would be facing some sort of drawing cul-de-sac, down which no doubt many a pair of exhausted players could go.

From the diagram, the essential move for White is...

9.♙d2! It is this that poses Black the greatest problems in defense. The most precise play for both sides is presumably along the lines indicated by Glazkov: 9...♗ce7 10.♙xf4 ♙d7 11.d6 ♗g6 12.♙e4+ ♗d8 13.h3! ♕e6 14.♕xe6 ♙xe6 15.♙xb7 ♖c8 16.dxc7+ ♖xc7 17.♙a8+ ♖c8 18.♙xf3 with a small advantage to White. But there are so many possibilities along the way, that one must be very careful about passing sentence. In any event, the line's further complexities are beyond the bounds of our subject matter.

21. METHODOICAL RETURN TO MORE GENERAL PROBLEMS

The outcomes achieved so far are coordinated, summed, and generalized. Once more, all the previous analyses and previous evaluations are checked. In the course of such a methodical return to more basic problems, earlier assessments are tested again with regard to all that is *for* and *against*. This kind of auxiliary method, thanks to which it is possible to verify earlier evaluations, de Groot called “dialectical deepening” or, somewhat less pretentiously, “pro-con analysis” [T&C, p. 291].

IV Test Your Chess Fantasy

1. TEST CONSTRUCTION

We want to make it clear from the start that this section is not scientific in nature. Both those who will use it for self-instruction, as well as chess coaches, instructors, or teachers, must bear in mind that tests should fulfill certain scientific requirements if they are to be reliable and meaningful. Generally, a well-constructed test is characterized by:

1. **Standardization.** There should be uniformity of procedure during the examination, reducing to a minimum any effect on the result by the examining individuals, or by factors external to the examination.
2. **Normalization.** This involves establishing indicators, norms, calculated by studying large groups. With such norms we can interpret an individual's result against the background of larger samples in the population.
3. **Objectivity (interscorer reliability).** Irrespective of who analyses the results, or where, they should arrive at the same conclusions. The principles of operational assessment are unambiguously specified.
4. **Reliability.** The consistency (repeatability) with which the test measures whatever it measures.
5. **Validity.** This tells us whether the given test actually measures what it purports to measure.

As you will come to realize, these requirements cannot always be fully met when such a complex and hard-to-grasp field as chess creativity is being studied.

In constructing the present test we did not rely on statistical methods commonly used in psychology. We base it purely on our own experience, more than a decade of competitive practice and coaching work. Which is why we caution against using the problems and exercises in this book for selection purposes. Let anyone who has such an intention bear in mind that this chapter in test form is based on subjective experience.

For how does one measure and compare:

- whether it is more difficult to work out a long variation, or to find a well-hidden idea;
- whether it is easier to calculate one long umpteen-move variation, or several short ones;
- whether it is harder to uncover a complicated knight maneuver, or one by a bishop;
- whether an unexpected tactical combination is more brilliant, or instead a surprising strategic maneuver;
- whether a rook mate is finer than one by the queen;
- the difficulty of the same queen sacrifice in two entirely different positions.

We could give many more examples. We shall content ourselves with just these. And we will not refer here to the problem of awarding “points” to such elements. Despite methodological difficulties, we tried to arrange the problems here more or less logically. The section that follows shows the principles we were guided by.

1. Problem Classification

In each problem we tried to separate the following elements:

- whether the solution has more a STRATEGIC character, or more a TACTICAL one;
- whether the position comes from the OPENING, MIDDLE GAME, or ENDGAME.

We draw your attention to the expressions “more strategic” and “more tactical.” There is no such thing as “pure strategy” or “pure tactics” in chess. Strategy, the plan we undertake on the chessboard, and tactics, the specific way of carrying it out, are imprecise notions. Every strategic plan contains many combinational, tactical motifs, and every tactical operation rests on strategic principles. In chess literature this relationship between strategy and tactics is often expressed in terms like these: strategy involves the question of *what* should be done, whereas tactics that of *how* it should be done. So we decided, on the basis of subjective feelings, to assign problems either to a “strategic” or a “tactical” category (thereby abandoning the judgmental methods of appraisal familiar in psychology). We tried to assess which factor, strategic or tactical, predominates in the solving of the problems.

The problem's category was assigned as follows:

- OPENING, if less than a dozen or so moves have been made in the game and not all the pieces have been moved from their starting positions;
- MIDDLE GAME if the number of moves completed is in double figures, the majority of pieces having been developed;
- ENDGAME if both sides are left with only one or two pieces (with or without pawns).

In several cases category assignment was uncertain, since the dividing lines between opening, middle game, and endgame are not clear-cut. If in a specific case you come to a different opinion, there is nothing to prevent you from re-classifying the problem, and entering your score in the now different, appropriate category.

Based on the above considerations we grouped the problems as follows:

- I. OPENING STRATEGY
- II. MIDDLE GAME STRATEGY
- III. ENDGAME STRATEGY
- IV. OPENING TACTICS
- V. MIDDLE GAME TACTICS
- VI. ENDGAME TACTICS

There are 20 problems in each of these categories.

2. Progressive Level of Difficulty

The problems were so arranged that the easiest – those that a 1400 (100 BCF) player might solve – come at the beginning, but the degree of difficulty gradually increases up to the hardest of all, on which even Grandmasters will have to spend a great deal of effort!

Naturally, in determining the sequence, problems arose as to why one problem is supposed to be harder than another. Even if we were to rely on measurable criteria: a required length of calculated variations, number of lines which have to be checked, number of tactical motifs contained in the solution, etc. – even then, there comes a point when one must relate the measurable to the immeasurable, comparing material factors with qualitative ones. In such instances we rely on our own experience. To

minimize the chance of a mistake, the 20 problems within each of the six categories have been grouped according to the level of play. (Though obviously, the comparisons between ratings, grades, categories, and titles, should be treated only as rough guides.)

- Problems 1 to 5 relate to an elementary level, corresponding to an Elo rating of about 1600-1800 (125-150 BCF; Categories II to III); we think that only one or two of them can be solved by most 1400 (100 BCF; Category IV) players.
- Problems 6 to 10 relate to an intermediate level, corresponding to a rating of about 2000-2200 (175-200 BCF; Category I to Candidate Master).
- Problems 11 to 15 relate to the Master level, corresponding to a rating of about 2300 (210+ BCF).
- Problems 16 to 20 relate to the Grandmaster level, corresponding to the titles of IM and GM, and a rating of over 2450 (230+ BCF).

With such groupings it is much easier to compare the levels of difficulty, and easier to interpret later results as well.

2. HOW TO SOLVE THE PROBLEMS AND ASSESS PERFORMANCE

You have 120 problems in front of you, which should be solved in sequence. With each problem we tell which side has the first move, and have suggested three possible analyses of further play. Of these three analyses just one – and only one! – is correct. We would like to stress that these are not problems to test skill in discovering combinations. You should not assume that in every position a winning combination must or can be found. Try to think as if this was an ordinary tournament game, that you have arrived at a certain position and have to continue the game. The game's further progress has to be anticipated as precisely as possible. That means, you have to decide on one of three possible answers and be able adequately to justify that particular selection and not a different one. Or in other words, to finish up with an insight into what is actually happening and what will happen on the board.

Next, you can compare your answers with those in the solutions section.

And here you must perform a responsible task, that of honest self-criticism. This is also a difficult assignment, to determine how well the problems were carried out. What and how to evaluate, is proposed in the following sub-sections.

1. Intuitive appraisal

By intuitive appraisal we mean the assessment made just after initial familiarization with the problem. Here we assume that after the lapse of one or at most two minutes, you will state which of the three possible answers is the right one – and be able to state approximately why that one in particular.

Scoring

No score – An incorrect answer given (from the possible A, B, or C).

1 point – The correct answer given but a different supporting plan considered, inadequate to the requirements of the position.

2 points – The correct answer given, based on foreseeing the right game plan or combination.

2. Analytic assessment

By analytic assessment we mean all our judgements on positional factors: moves, plans, ideas, attacks and defenses, files, ranks, and squares, diagonals, “good” and “bad” pieces, etc. We include the assessment of entire variations, as well as our subjective appraisal of the means of solution (in so far as it was cohesive, logical, and well ordered). We deliberately set aside here the calculating of variations, keeping a separate category for its assessment. At the same time we point out that in such an artificial separation of the technique of calculating variations, the notion of analytic assessment is interpreted here differently from the way usual in chess literature.

Scoring

No score – An incorrect answer given. No attention paid to important elementary positional factors; omission of the main tactical motifs.

1 point – An incorrect answer given. Notice taken of elementary positional factors and main tactical motifs.

2 points – The correct answer given. Only some of the important positional factors and tactical motifs noticed. A subjective feeling of uncertainty about whether the problem is solved correctly.

3 points – The correct answer given. Some unimportant positional factors and tactical motifs left out, but the majority well noted.

4 points – The correct answer given. Notice taken of all important positional factors and tactical motifs. An ideal blend of evaluation of the position and the variations arising from it. Full control of the events on the chessboard.

3. Calculation of Variations

Since skill in calculating variations is an especially important technique in chessplayers' armories, we have separated it here by way of a supplement, detaching it in a perhaps somewhat artificial manner from analytic assessment. You are asked only to consider all the moves that you examined, without regard to evaluations, ideas, plans, or the like. Attention must be paid to those variations that are particularly essential to a solution, constituting its principal base – which is why we will be calling them main variations. Often, however, one must also consider many short variations of a parenthetical kind, or quite straightforward ones – those in which the opponent's second-best, or sometimes thoroughly poor, play appears. We will call these side variations.

Scoring

No score – Variations calculated completely wrongly, with mistakes, and having no connection to the requirements of the position. Variations not worked out at all – in a situation in which a great deal of calculation was necessary.

1 point – Variations calculated in conformity to the requirements of the position, but not fully – the main variations (mentioned in the solution) and the side ones alike.

2 points – Main variations calculated well, but few if any side ones. Some unimportant errors.

3 points – Main variations and some side ones calculated well.

4 points – Main and side variations fully calculated, without mistakes. A subjective feeling of full control of the events on the chessboard.

4. Time Allowance

All of our chess activities take place over time and are usually limited by it to a greater or lesser extent. Time is also the measure of our ability to solve problems. Which is why it is worthwhile to devote some attention to it in the assessment of solutions.

Before determining the principles of awarding points, we took into account the tournament situation with its typical conditions of game speed and time trouble.

Scoring

No score – Time taken to solve the problem: over 60 minutes.

1 point – Time taken: 31 to 60 minutes.

2 points – Time taken: 16 to 30 minutes.

3 points – Time taken: 5 to 15 minutes.

4 points – Time taken: less than 5 minutes.

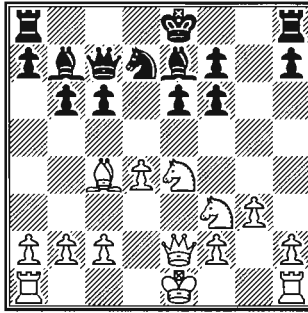
When we have entered all our scores in the tables in Section V, we can proceed to interpret the results. We can count up the points within each category, we can add up their grand total for ourselves and determine what percentage of the total possible points was scored, and so on. Remember, however, that from the methodological point of view, we are not entitled to compare categories with each other, as there is no fixed, common criterion for awarding points in this book; there are no analyses as to what extent particular categories satisfy the parameters they represent. In other words, it is not suggested here – in a clear and distinct manner, taking statistical procedures into account – that problems from, say, the OPENING STRATEGY category, really do belong there, or that problem 120 is in fact harder than number 100.

Despite such formal limitations, we can still attempt a summing up. On the basis of the assembled data we can make a thorough analysis of our

own creativity, define the attributes of our thinking, and observe its strong and weak sides. So that the margin for error was as small as possible, we took care to acquaint you with some of the more important procedural difficulties we encountered in selecting positions for this book. At the same time, we were in no doubt that the price we paid, in straying from certain methodological requirements, was not too great in comparison with the value of experiencing the land of chess fantasy.

3. PROBLEMS

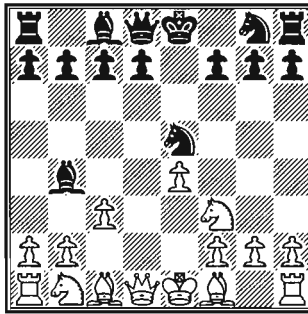
Problem #1



White to move.

- A. After 1. ♖a6 White has the upper hand.
- B. After 1. ♖a6 White loses very soon.
- C. After 1. ♖a6 the position is even.

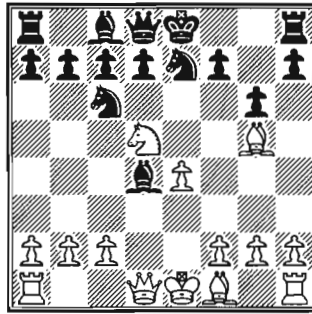
Problem #2



Black to move.

- A. 1... ♗d6 is weak from a positional point of view. White is clearly better after this.
- B. 1... ♗d6 is Black's only chance to achieve an edge.
- C. The move 1... ♗d6 is a good one; Black equalizes.

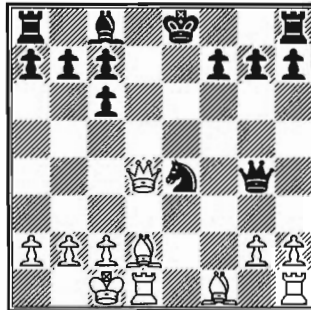
Problem #3



White to move.

- A. White, although a piece down, wins very soon.
- B. White, although a piece down, obtains a draw.
- C. White is lost.

Problem #4



White to move.

- A. Black's king is trapped. White wins.
- B. Black wins, using his forces on the kingside.
- C. In a difficult situation Black finds the continuation leading to a draw.

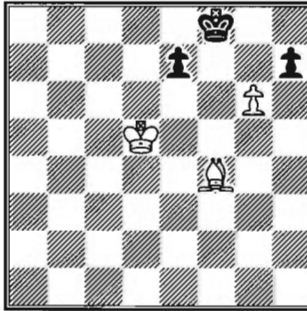
Problem #5



White to move.

- A. White has no compensation for his pawn, and Black's counter-attack will win.
- B. White is a pawn down, but finds an interesting way to equalize.
- C. White ends the attack quickly and in style.

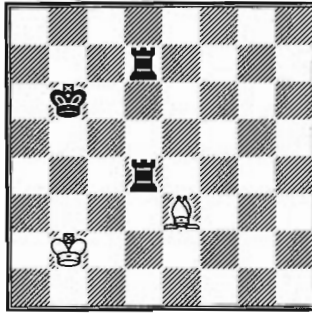
Problem #6



White to move.

- A. White is able to win.
- B. A draw is inevitable, though White can do it amusingly.
- C. White has insufficient material to achieve a win.

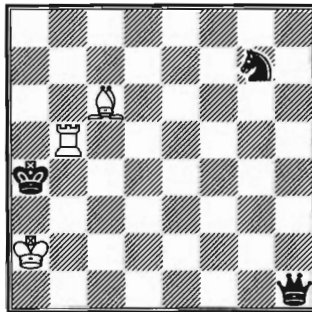
Problem #7



White to move.

- A. White can set a trap, but nevertheless loses.
- B. White can draw!
- C. White should resign.

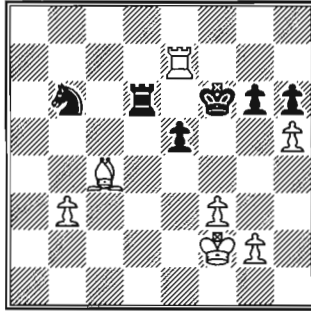
Problem #8



White to move

- A. White can obtain a draw.
- B. White is able to win.
- C. Black breaks White's resistance and wins.

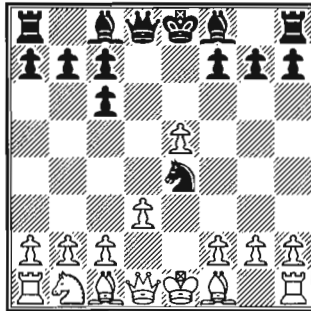
Problem #9



White to move.

- A. White wins.
- B. It will be a draw.
- C. White has one last trap at his disposal, but everything should end in a draw.

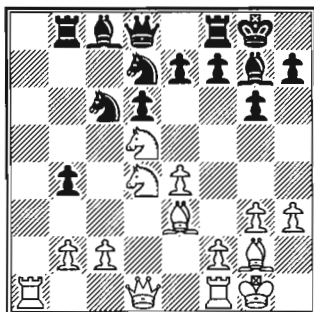
Problem #10



Black to move.

- A. Black can carry out an interesting maneuver and get a better position.
- B. Black wins immediately.
- C. Black must defend carefully to equalize the game.

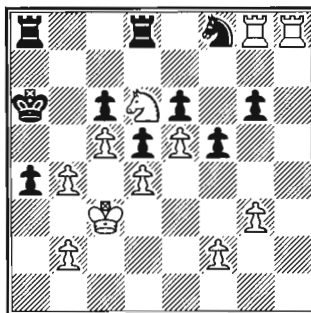
Problem #11



Black to move.

- A. White's positional domination is only an illusion. Black wins.
- B. The big advantage in space is enough for White to win the game.
- C. Some strong positional moves, and Black equalizes.

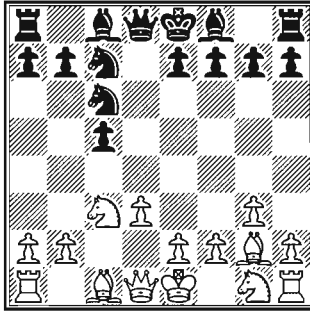
Problem #12



White to move.

- A. It is time for a winning combination. White wins.
- B. It is time for a winning maneuver. White wins!
- C. White can reach a slightly better position.

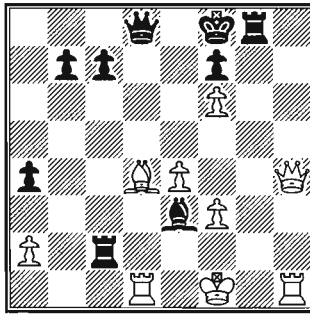
Problem #13



White to move.

- A. A good positional solution brings White an edge.
- B. A good tactical solution brings White an edge.
- C. White can realize an interesting idea, with an equal game.

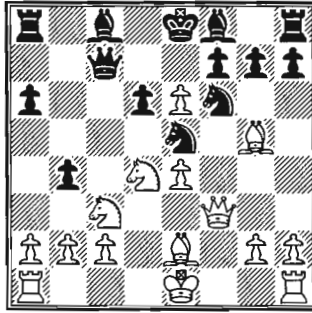
Problem #14



Black to move.

- A. This sharp position leads to perpetual check.
- B. Black's king is less safe. White wins.
- C. Black wins, because his king is safer.

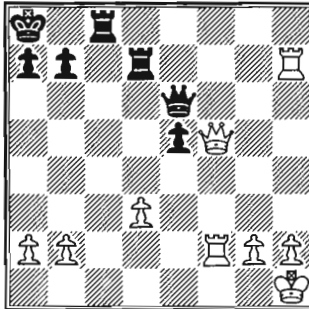
Problem #15



White to move.

- A. In spite of the fact that he has two pieces in danger, White wins.
- B. White has some problems with a couple of his pieces, but can find a combination leading to a draw.
- C. Black wins material and the game.

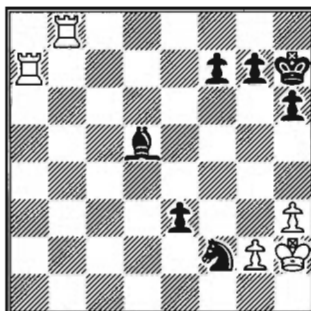
Problem #16



White to move.

- A. White must lose, because his first rank is very weak.
- B. White wins immediately, because Black's pieces are unfortunately placed.
- C. White must lose, because his pieces are unfortunately placed.

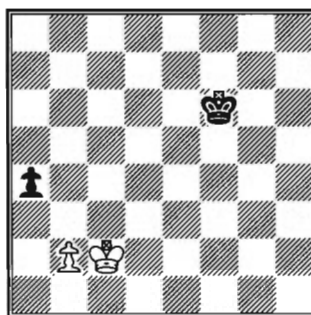
Problem #17



Black to move.

- A. White's rooks can work very hard. White is winning.
- B. Black is able to obtain a draw.
- C. Black wins. Two minor pieces defeat two rooks.

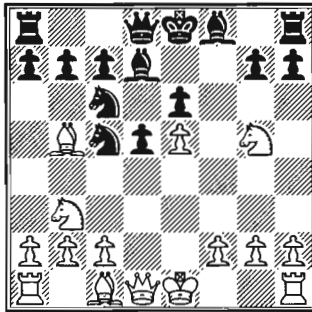
Problem #18



White to move.

- A. White wins, but only after accurate play with his king.
- B. A draw is inevitable, though Black must still fight for it.
- C. White must reconcile himself to a draw – but he should do it with humor.

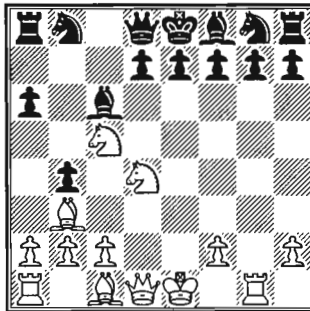
Problem #19



White to move.

- A. White can sharpen the position.
- B. White must fight for a draw.
- C. White wins by attacking the enemy king.

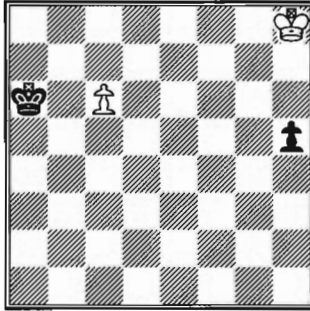
Problem #20



White to move.

- A. Due to his activity, White is able to obtain a draw.
- B. Black is better, but must defend carefully.
- C. White wins thanks to the activity of his pieces.

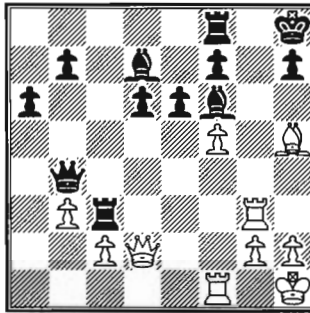
Problem #21



White to move.

- A. White does best to resign at the proper time. Like now!
- B. Black wins, but must avoid a little trap.
- C. It will be a draw!

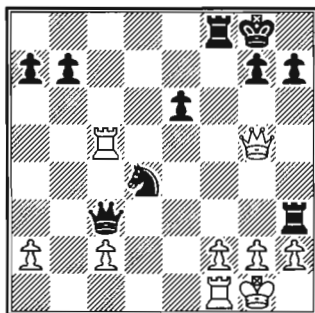
Problem #22



White to move.

- A. Although a piece down, White has an ingenious resource that draws.
- B. Although a piece down, White has an ingenious resource and wins.
- C. Black keeps his cool, and wins.

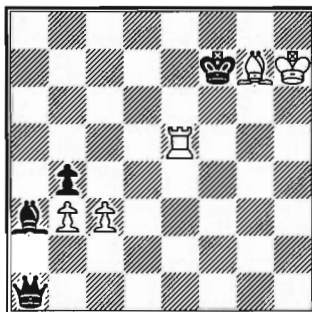
Problem #23



Black to move.

- A. There is a spectacular combination here. Black wins.
- B. Coming up is a fantastic attack in the black king's direction. White wins.
- C. It will only be a draw!

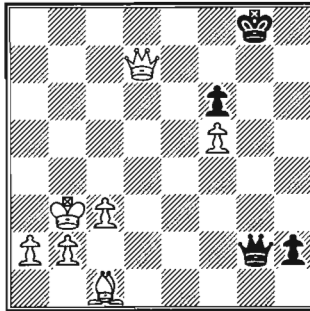
Problem #24



White to move.

- A. Black has a big advantage in material and wins.
- B. In spite of Black's big advantage in material, White wins.
- C. In spite of Black's big advantage in material, White is able to obtain a draw.

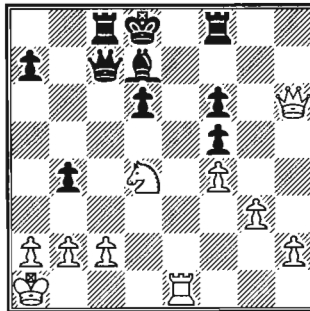
Problem #25



White to move.

- A. Material quantity is not so important, but rather its quality! Black wins due to the h2-pawn.
- B. White gets half a point by perpetual.
- C. Black loses, even possessing such a strong h2-pawn.

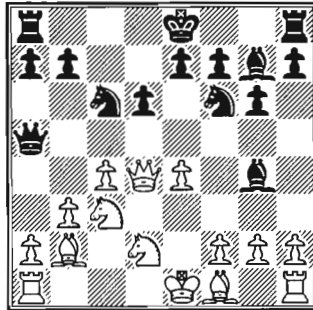
Problem #26



Black to move.

- A. Black is able to do more than defend his position – it is time for a decisive counter-attack!
- B. White's attack is enough to obtain a draw.
- C. Black is not able to defend the position, and loses.

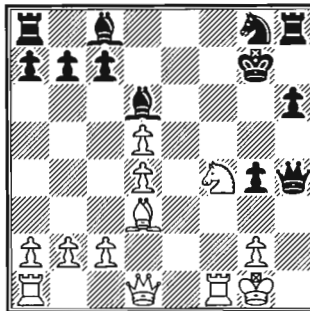
Problem #27



White to move.

- A. White is clearly better.
- B. The position is even.
- C. Black is clearly better.

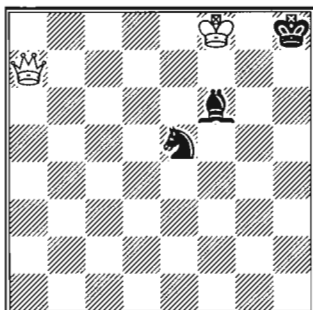
Problem #28



White to move.

- A. White can salvage half a point.
- B. White is worse, but can attempt a swindle.
- C. White is winning.

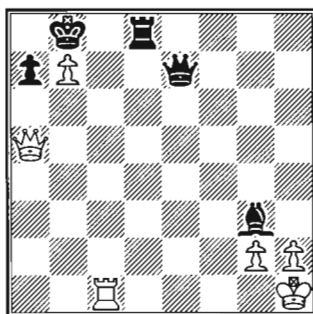
Problem #29



Black to move.

- A. White wins a piece and the game.
- B. White cannot avoid his king being captured.
- C. The position is balanced.

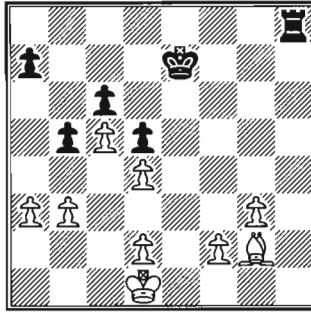
Problem #30



White to move.

- A. White wins.
- B. White escapes. It's a draw!
- C. Black wins.

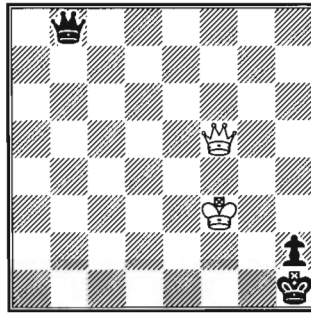
Problem #31



Black to move.

- A. A draw is inevitable.
- B. Black wins by force.
- C. White should win, with three pawns for the exchange.

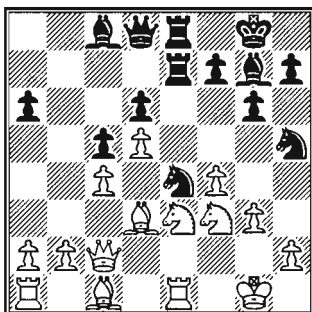
Problem #32



White to move.

- A. White wins!
- B. White can get a draw.
- C. Black's maneuvers will be very subtle – and he wins.

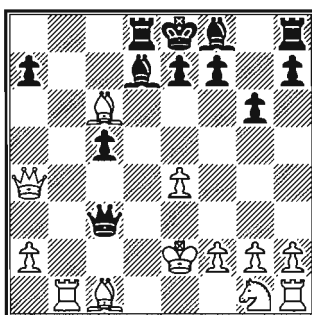
Problem #33



Black to move.

- A. Black can win in a brilliant way.
- B. Black can equalize.
- C. Black can obtain a strong initiative.

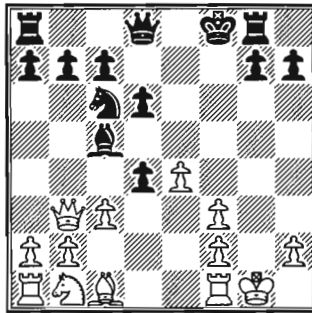
Problem #34



Black to move.

- A. Black gains a clear advantage.
- B. Black draws.
- C. Black must lose.

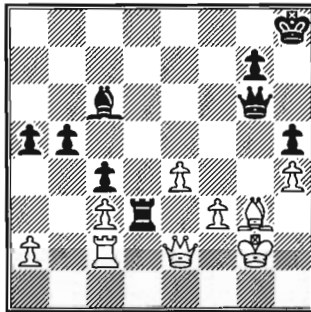
Problem #35



Black to move.

- A. Black stands better.
- B. Black can draw.
- C. White stands better.

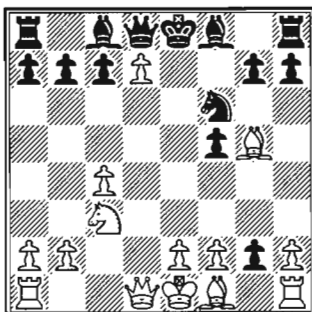
Problem #36



Black to move.

- A. Black can win.
- B. This position is even.
- C. White's central pawns are the main factors that determine his victory.

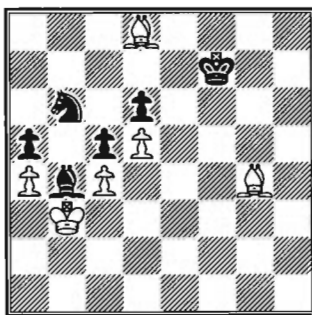
Problem #37



Black to move.

- A. White wins.
- B. Draw.
- C. Black wins.

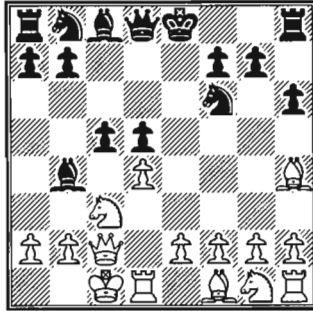
Problem #38



Black to move.

- A. Black is slightly better because the knight is better than the white bishop.
- B. The knight is lost, therefore White wins.
- C. In a difficult situation Black can obtain a draw.

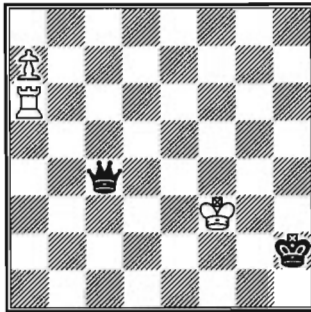
Problem #39



Black to move.

- A. Black takes the initiative and has better prospects.
- B. Black can equalize.
- C. Black is slightly worse.

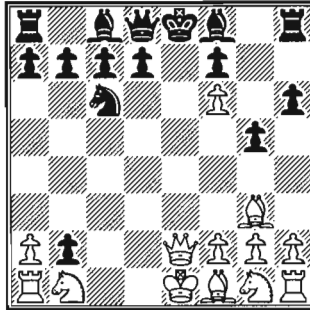
Problem #40



White to move.

- A. The best thing White can do is to promote his pawn immediately. It is enough to win.
- B. White has a nice blow that wins. Pawn promotion is deferred!
- C. Black can obtain a draw.

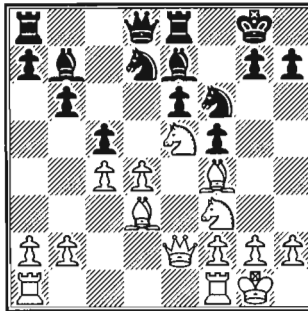
Problem #41



Black to move.

- A. White wins.
- B. Black wins.
- C. It will be a draw.

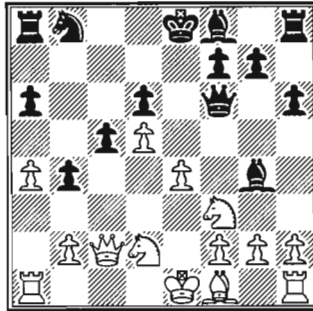
Problem #42



White to move.

- A. White must think how to equalize.
- B. White has an effective way to gain an advantage.
- C. White has an effective way to win.

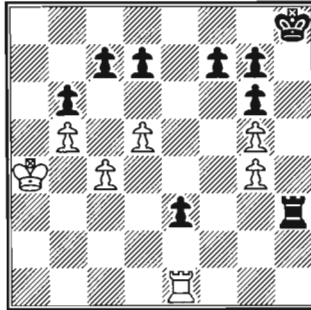
Problem #43



White to move.

- A. White takes an overwhelming initiative, and secures a clear advantage.
- B. White wins.
- C. Black is able to obtain the better position.

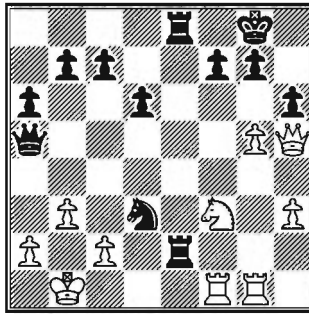
Problem #44



White to move.

- A. The e3-pawn is weak – and therefore White wins.
- B. It will be a draw.
- C. White is not able to save the position. Black wins.

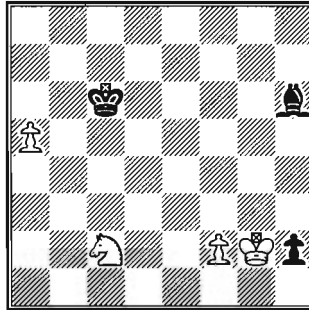
Problem #45



White to move.

- A. White finds an effective way to gain the advantage.
- B. White finds an effective way to obtain a draw.
- C. Black's domination decides – he wins.

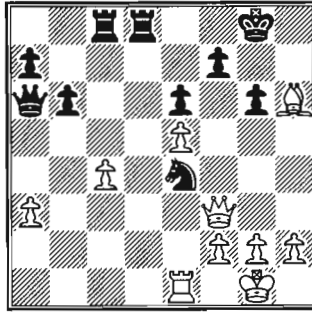
Problem #46



White to move.

- A. White wins.
- B. White is slightly better.
- C. The position is even.

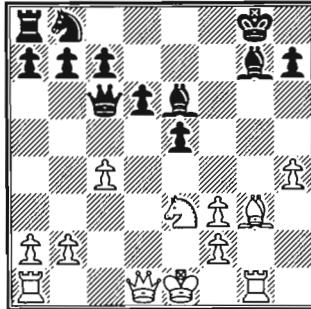
Problem #47



White to move.

- A. White has the upper hand.
- B. This position is even.
- C. Black has the upper hand.

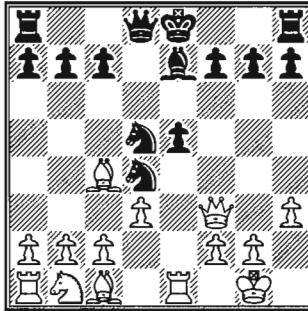
Problem #48



White to move.

- A. Black wins.
- B. Black is equal.
- C. White wins.

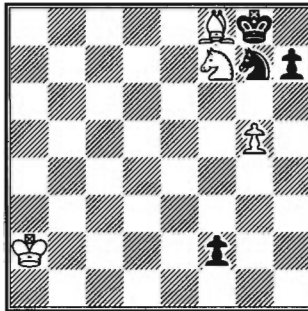
Problem #49



White to move.

- A. White is clearly better.
- B. This position is even.
- C. Black is clearly better.

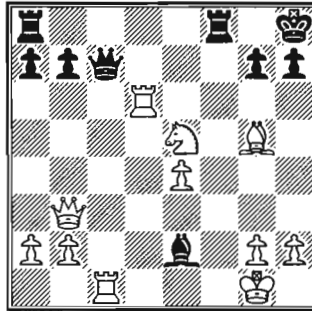
Problem #50



White to move.

- A. White wins.
- B. Draw.
- C. Black wins.

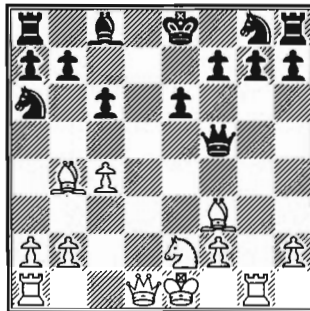
Problem #51



White to move.

- A. White wins.
- B. This position is even.
- C. Black wins.

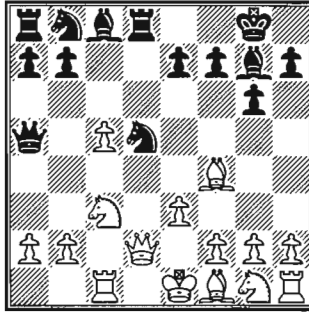
Problem #52



White to move.

- A. White has compensation for the two pawns.
- B. White wins very quickly.
- C. Black is actually better, and wins.

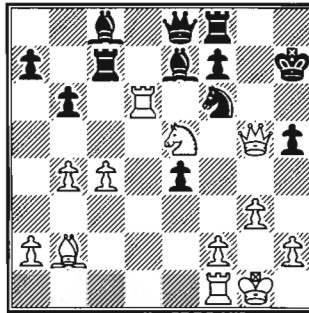
Problem #53



White to move.

- A. White wins.
- B. This position is even.
- C. Black will take the initiative.

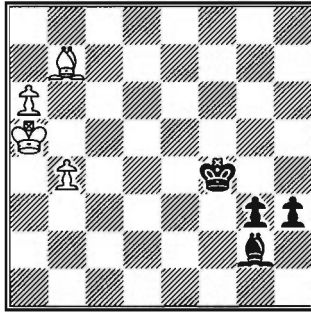
Problem #54



White to move.

- A. Black's king is weak; therefore White wins.
- B. Having a piece more, Black wins.
- C. Perpetual check ends the game.

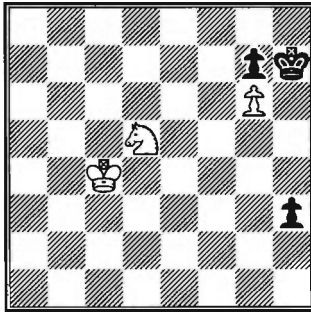
Problem #55



Black to move.

- A. It will be drawn.
- B. Black is lost.
- C. Black is winning.

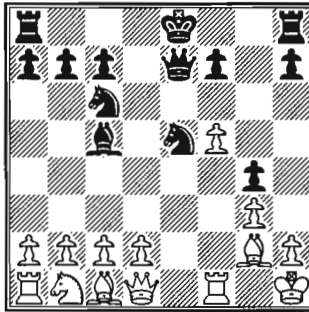
Problem #56



Black to move.

- A. Black has to be careful not to fall into a trap – then he wins.
- B. Suddenly everything ends in a draw.
- C. Black can easily defeat White providing he does not take the pawn on g6.

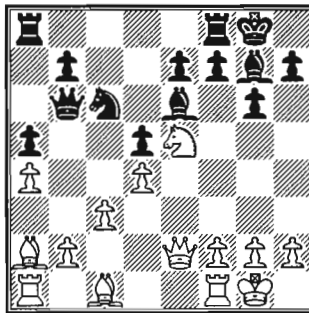
Problem #57



White to move.

- A. White has an attack that will give him an advantage.
- B. Black wins.
- C. This position is even.

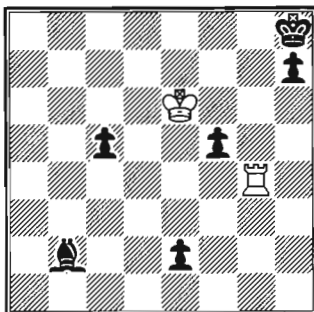
Problem #58



Black to move.

- A. White is better.
- B. Black is slightly better.
- C. Black can win.

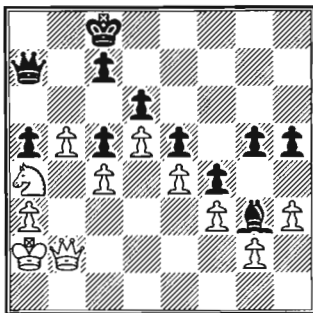
Problem #59



White to move.

- A. White wins.
- B. Draw.
- C. Black wins.

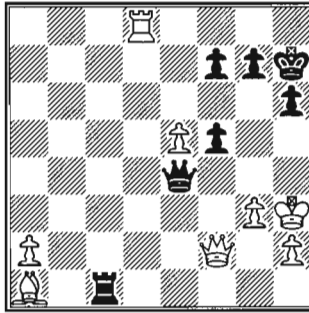
Problem #60



Black to move.

- A. Black has the upper hand.
- B. This position is even.
- C. White is clearly better, but must be careful – Black has some tricks at his disposal.

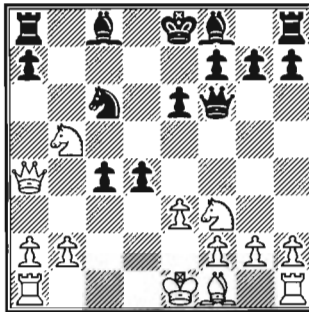
Problem #61



Black to move.

- A. If Black captures the bishop on a1, he loses immediately.
- B. Black puts White's kingside under heavy pressure, and wins.
- C. Black can only draw.

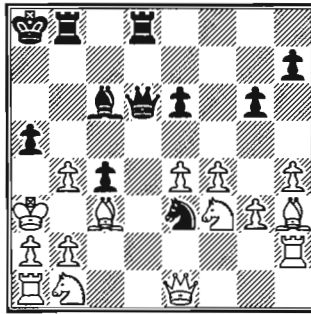
Problem #62



White to move.

- A. White can draw.
- B. White can win.
- C. White suddenly hits a brick wall, and loses.

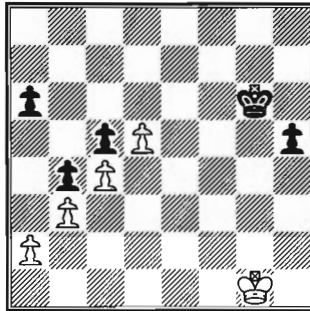
Problem #63



Black to move.

- A. White wins.
- B. This is a forced draw.
- C. Black wins.

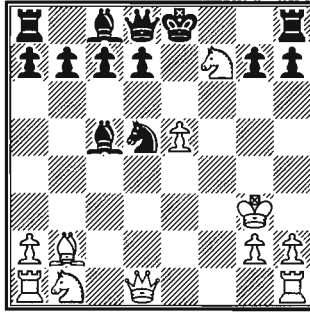
Problem #64



White to move.

- A. White can easily defeat Black – if he plays “fantastically.”
- B. Having so strong an h-pawn, Black can hope to win in this position.
- C. The game should end in a draw.

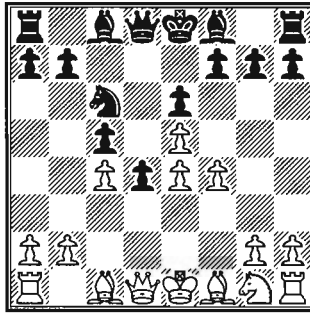
Problem #65



Black to move.

- A. White's king is very active, therefore he wins.
- B. White's king is very weak, therefore White can only draw.
- C. White's king is very weak, therefore Black wins.

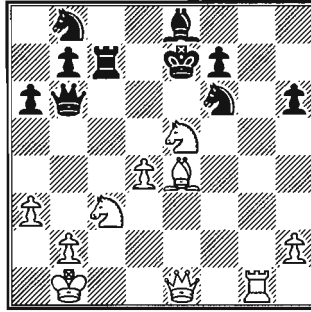
Problem #66



Black to move.

- A. White wins with lightning speed.
- B. Black has an ingenious resource – and a strategic advantage.
- C. Black has an ingenious resource and can draw.

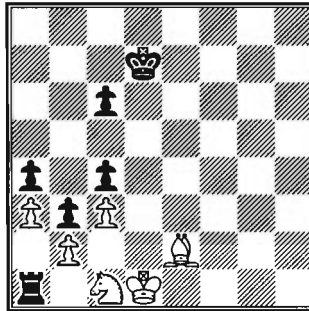
Problem #67



White to move.

- A. White wins.
- B. This position is even.
- C. White is slightly better.

Problem #68

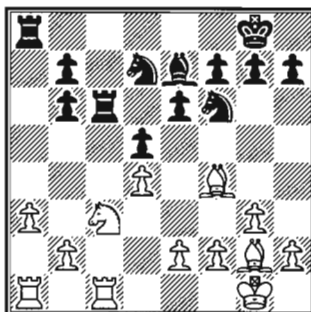


(Yes, that is a black rook on a1.)

White to move.

- A. White wins almost all the pawns and wins the game.
- B. White must fight for a draw – successfully.
- C. White pawns are lost, and therefore the game is over for him.

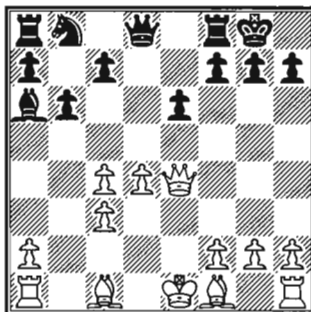
Problem #69



White to move.

- A. Black throws in a sacrifice on the queenside and wins.
- B. Even in such a quiet position, White can win at lightning speed – with a tactical blow.
- C. White can obtain a better position, due to an interesting maneuver.

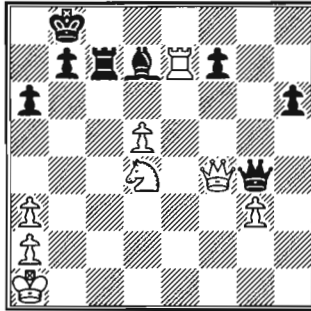
Problem #70



Black to move.

- A. Black is slightly better.
- B. Black is winning.
- C. White is clearly better.

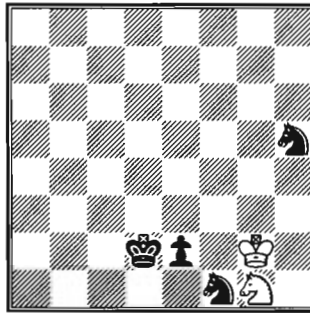
Problem #71



White to move.

- A. White wins.
- B. This position should end in a draw.
- C. Black wins.

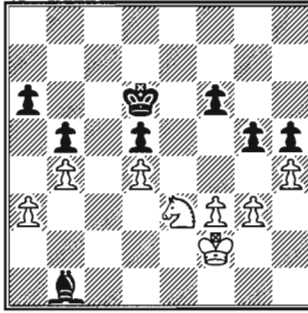
Problem #72



Black to move.

- A. Black runs out of steam and is not able to win.
- B. Black wins, but must produce evidence of fantasy.
- C. Black wins after hard maneuvering.

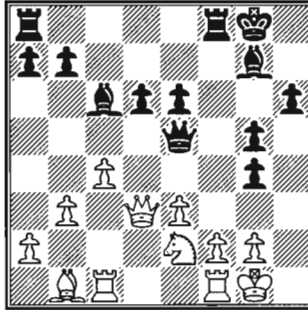
Problem #73



Black to move.

- A. After 1...g×h4 White wins.
- B. This is just the right moment to play 1...g×h4 and draw.
- C. This is just the right moment to play 1...g×h4 and win!

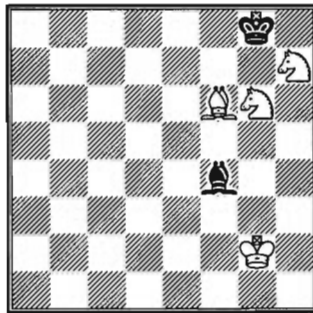
Problem #74



Black to move.

- A. White's threats are decisive – he wins.
- B. Black is able to draw.
- C. White's threats are not dangerous – Black is better.

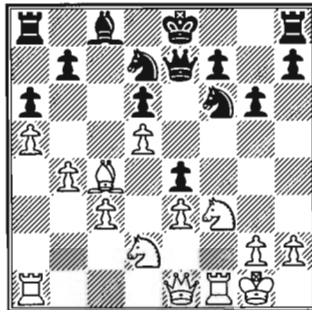
Problem #75



Black to move.

- A. White can win easily.
- B. Black can draw!
- C. Black has one last trap at his disposal, but is losing anyway.

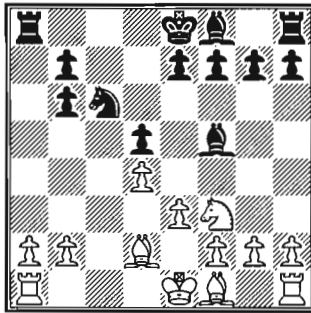
Problem #76



White to move.

- A. White is better.
- B. The position is even.
- C. Black is better.

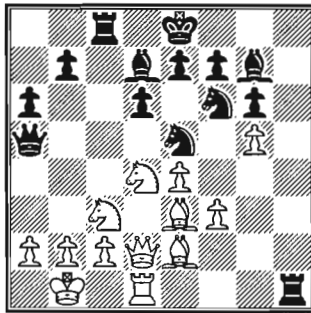
Problem #77



Black to move.

- A. Black has an interesting maneuver.
- B. Black has an interesting piece sacrifice.
- C. Black has an interesting pawn sacrifice.

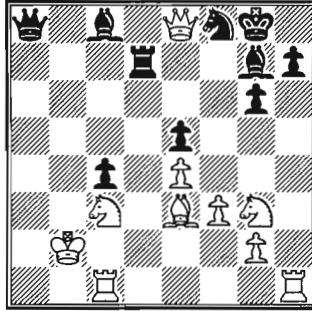
Problem #78



White to move.

- A. After 1.♖×h1 White is lost.
- B. White can win.
- C. White can draw.

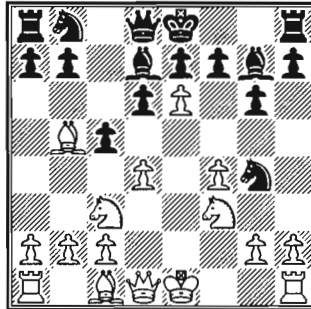
Problem #79



Black to move.

- A. White cannot avoid his king being mated.
- B. In a difficult situation Black can draw.
- C. White wins.

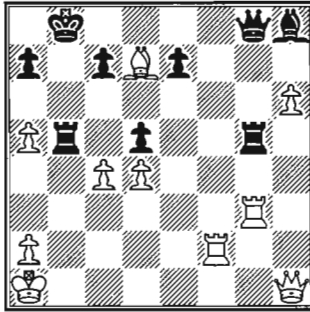
Problem #80



Black to move.

- A. Black can capture the e6-pawn, which would give him an even game.
- B. Black cannot capture the e6-pawn, because after ♖g5 he is lost.
- C. The only way to equalize is ...♙×b5.

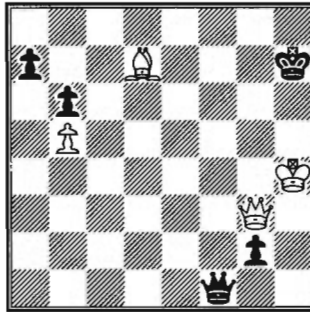
Problem #81



White to move.

- A. It will be a draw.
- B. White to move, but Black has the final word – he wins.
- C. In such sharp positions time is the most important factor. Therefore, White to play wins.

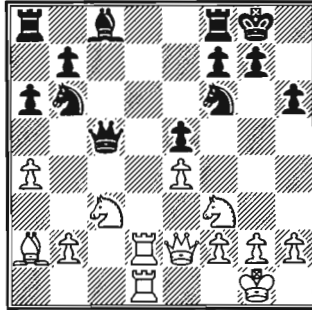
Problem #82



White to move.

- A. White is a piece up, but Black wins.
- B. White is a piece up, which is enough to win.
- C. White can draw.

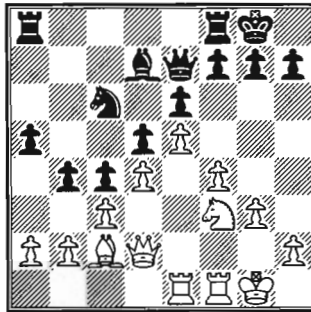
Problem #83



White to move.

- A. White is better.
- B. White can equalize.
- C. Black takes over the initiative.

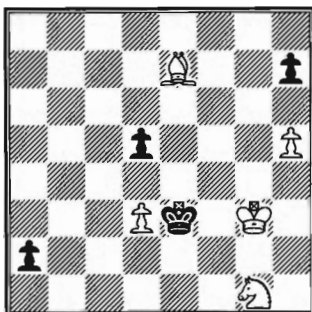
Problem #84



White to move.

- A. White must fight – successfully – for a draw.
- B. White stands very actively – he wins.
- C. White is slightly better.

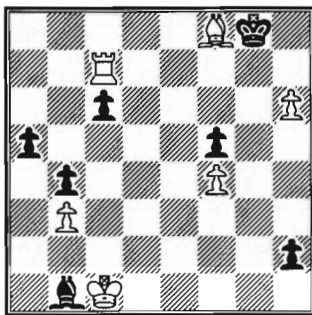
Problem #85



White to move.

- A. White wins.
- B. White is slightly better.
- C. Chances are equal.

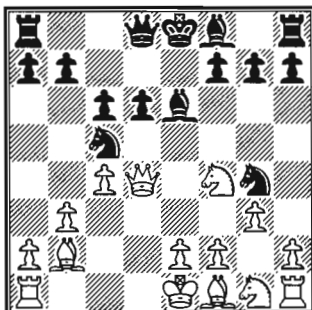
Problem #86



White to move.

- A. White wins easily.
- B. White can draw.
- C. White is slightly better.

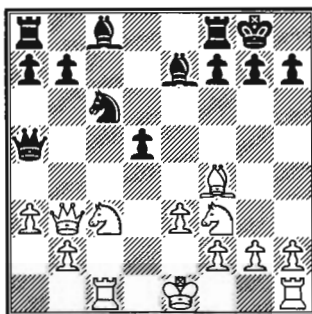
Problem #87



Black to move.

- A. White can hope to win in this position.
- B. Black can hope to equalize.
- C. Black can hope to win in this position.

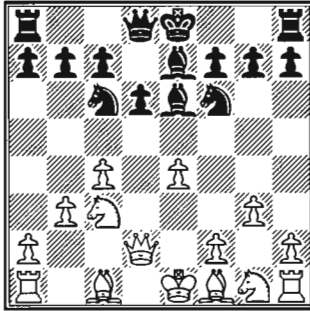
Problem #88



Black to move.

- A. Black is clearly worse.
- B. Black has an interesting idea – with an unclear game resulting.
- C. Black is winning easily.

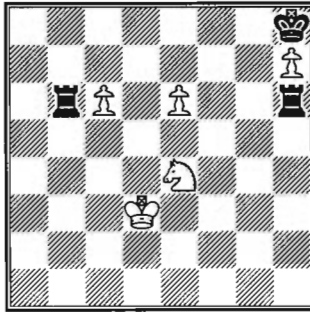
Problem #89



Black to move.

- A. Black does his best to counter-attack, with a draw.
- B. Black does his best to counter-attack, to his advantage.
- C. White is slightly better.

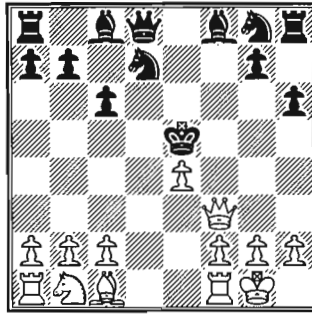
Problem #90



White to move.

- A. White wins.
- B. The game should end in a draw.
- C. White cannot avoid defeat, but can try a last trap.

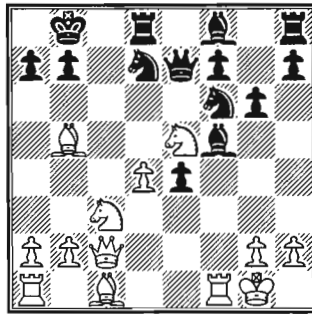
Problem #91



White to move.

- A. White does not allow the enemy king to escape, and wins.
- B. White – two pieces down – is able to obtain a draw.
- C. White – two pieces down – is lost.

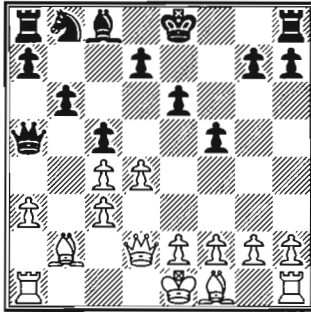
Problem #92



White to move.

- A. White wins.
- B. White is slightly better.
- C. The position gives equal chances.

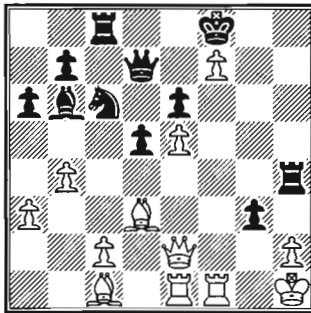
Problem #93



White to move.

- A. The position is even.
- B. White has the upper hand.
- C. Black has a decisive advantage.

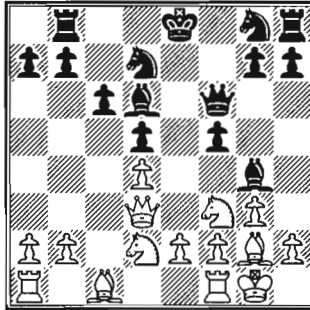
Problem #94



White to move.

- A. White wins.
- B. White is slightly better.
- C. The position is even.

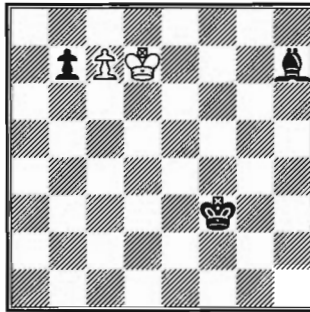
Problem #95



White to move.

- A. White gains the initiative, and the better prospects.
- B. White must fight for a draw.
- C. Black gains the initiative, and stands well.

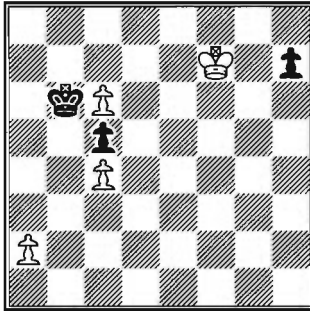
Problem #96



White to move.

- A. White wins.
- B. White has full equality.
- C. White is lost.

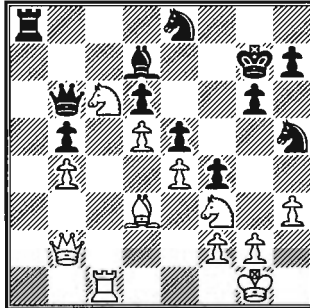
Problem #97



White to move.

- A. White wins by force.
- B. Black wins by force.
- C. The position is level.

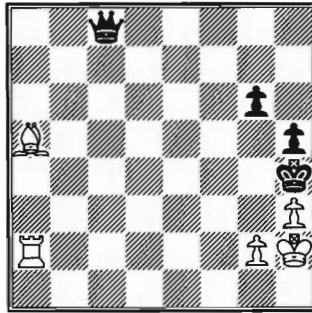
Problem #98



White to move.

- A. White puts the black position under heavy pressure.
- B. This position is even.
- C. Black is suddenly winning.

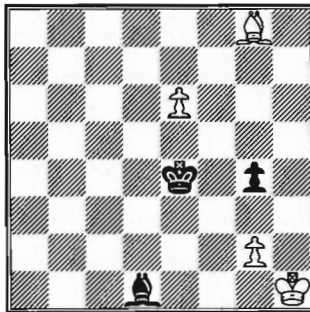
Problem #99



White to move.

- A. The two white pieces do not allow the enemy king to escape from the mating net.
- B. Black has a big advantage in material, and wins.
- C. The game should end in a draw.

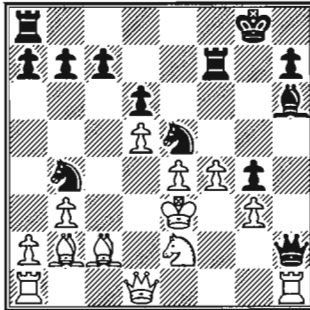
Problem #100



Black to move.

- A. White wins!
- B. Black has an ingenious resource, and wins!
- C. In a difficult position Black finds the way to equalize.

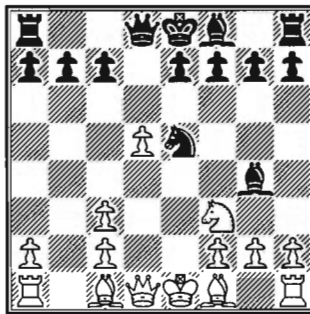
Problem #101



Black to move.

- A. In a difficult position Black finds a fantastic motif, and draws.
- B. The h-file will see serious action, and the black king will get mated.
- C. Black has an attack, and wins!

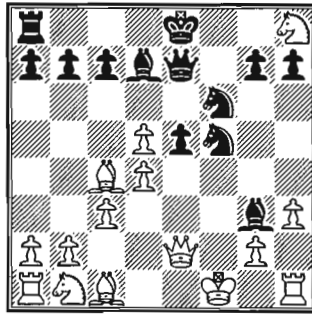
Problem #102



White to move.

- A. White wins very quickly.
- B. White has a lost game, from the strategic point of view.
- C. Only White can claim any advantage.

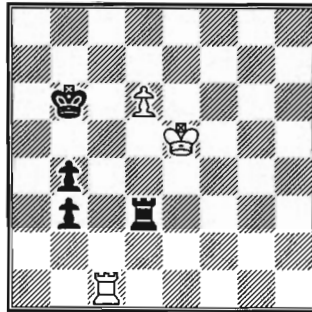
Problem #103



Black to move.

- A. White must be very careful not to fall into some traps – then he will win.
- B. Black, a rook down, is able to draw.
- C. Black, a rook down, is able to win!

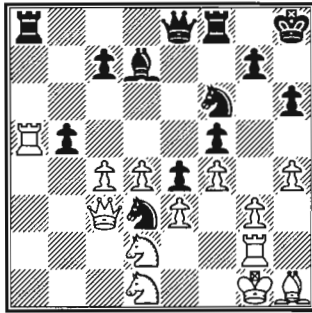
Problem #104



White to move.

- A. White wins.
- B. White can only achieve a draw.
- C. Black wins.

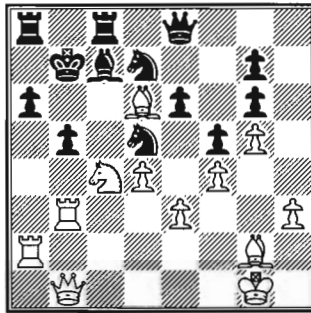
Problem #105



Black to move.

- A. Black can equalize.
- B. Black wins.
- C. White wins.

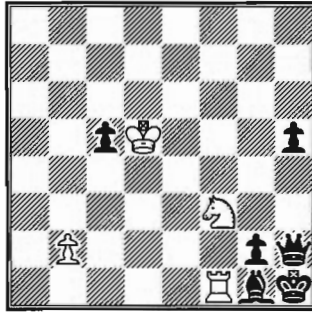
Problem #106



Black to move.

- A. Black's position falls apart – White wins.
- B. This sharp position should end in a draw.
- C. Black has a decisive advantage.

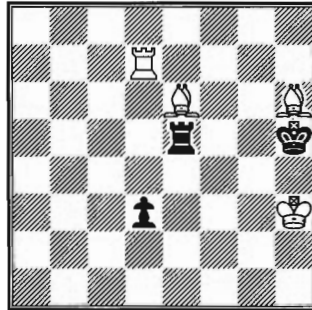
Problem #107



White to move.

- A. White can escape – draw!
- B. Suddenly White is winning!
- C. Black wins, but must play accurately.

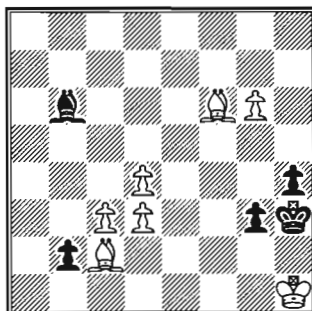
Problem #108



White to move.

- A. White wins.
- B. White is slightly better.
- C. This position is level.

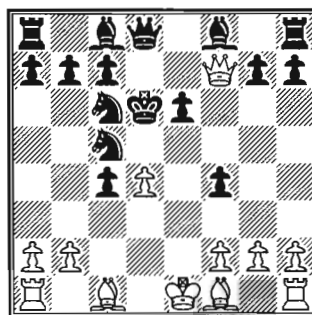
Problem #109



Black to move.

- A. Black avoids all White's traps, and wins!
- B. The position is even.
- C. White wins.

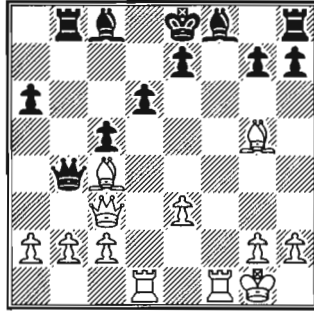
Problem #110



White to move.

- A. White does not allow the enemy king to escape, and wins.
- B. Black has a big advantage in material, but White can obtain a draw.
- C. Black stays calm, and wins!

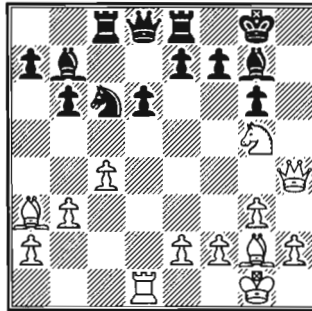
Problem #111



White to move.

- A. White wins.
- B. Chances are equal.
- C. Black has the upper hand.

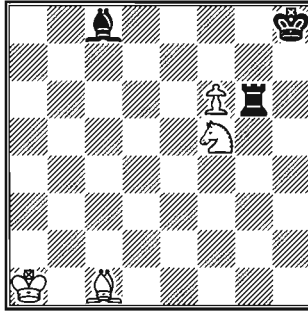
Problem #112



White to move.

- A. White's attack is decisive.
- B. White is a rook down, but obtains a draw.
- C. After sturdy defense, Black wins.

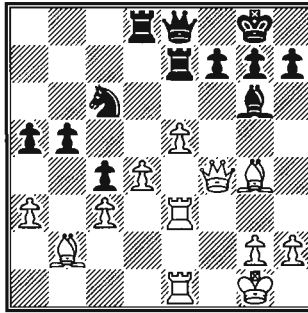
Problem #113



White to move.

- A. White wins.
- B. This position is level.
- C. Black wins.

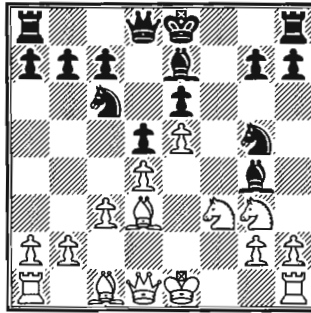
Problem #114



Black to move.

- A. In a difficult position, Black finds an interesting way to equalize.
- B. White wins by moving his pawns forward.
- C. Black's win is achieved by means of an elegant counter-attack.

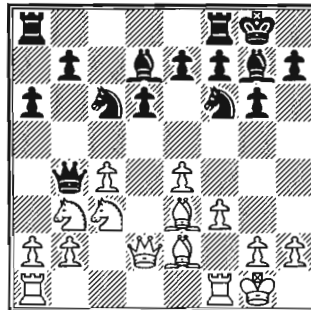
Problem #115



White to move.

- A. The difficulties along the d1-h5 diagonal are unpleasant – White is therefore lost.
- B. The difficulties along the d1-h5 diagonal are not overwhelming – White equalizes.
- C. The “difficulties” along the d1-h5 diagonal are only an illusion – White wins.

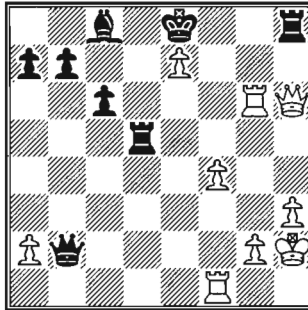
Problem #116



White to move.

- A. White can punish Black severely.
- B. The position is more or less level.
- C. Thanks to a little trick, White can preserve a small advantage.

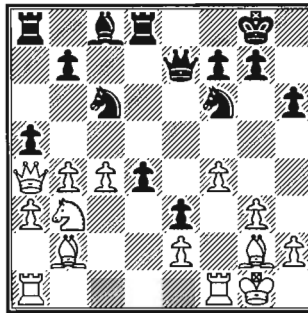
Problem #117



White to move.

- A. White is a piece down, but fully equalizes.
- B. Black is a piece up, and should win.
- C. White is a piece down, but wins!

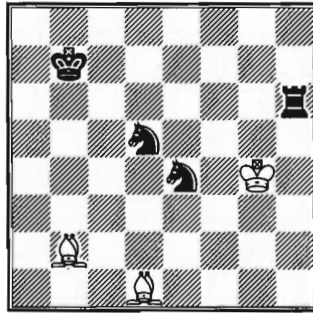
Problem #118



Black to move.

- A. Black wins!
- B. Black can achieve an even game.
- C. Black's pawns at d4 and e3 are lost, as is the whole position.

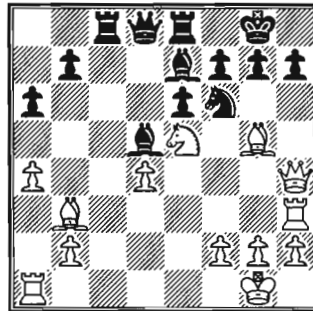
Problem #119



White to move.

- A. White's bishops are a menace – it will be a draw.
- B. Black defends, and wins.
- C. Black's knights are apparently weak – but he still wins on material!

Problem #120



White to move.

- A. Black's attack along the c-file is decisive.
- B. White has a fine combination, which gives him victory.
- C. White has a fine maneuver, which gives him victory.

4. ANSWERS

Problem	Answer	Problem	Answer
1.	B	31.	A
2.	C	32.	A
3.	A	33.	C
4.	A	34.	A
5.	C	35.	B
6.	A	36.	A
7.	B	37.	C
8.	B	38.	C
9.	A	39.	A
10.	B	40.	B
11.	A	41.	B
12.	B	42.	C
13.	A	43.	A
14.	C	44.	B
15.	B	45.	A
16.	B	46.	A
17.	C	47.	A
18.	A	48.	C
19.	C	49.	A
20.	C	50.	B
21.	C	51.	A
22.	B	52.	A
23.	A	53.	C
24.	C	54.	A
25.	C	55.	C
26.	C	56.	B
27.	B	57.	A
28.	B	58.	B
29.	C	59.	B
30.	A	60.	C

Problem	Answer	Problem	Answer
61.	B	91.	A
62.	B	92.	A
63.	C	93.	B
64.	C	94.	A
65.	C	95.	A
66.	B	96.	B
67.	A	97.	C
68.	B	98.	A
69.	C	99.	A
70.	A	100.	A
71.	A	101.	C
72.	A	102.	C
73.	A	103.	C
74.	C	104.	C
75.	A	105.	B
76.	A	106.	B
77.	A	107.	B
78.	B	108.	A
79.	B	109.	C
80.	A	110.	C
81.	C	111.	A
82.	C	112.	A
83.	A	113.	A
84.	B	114.	A
85.	A	115.	C
86.	B	116.	A
87.	C	117.	B
88.	B	118.	A
89.	B	119.	A
90.	B	120.	C

5. FULL SOLUTIONS

Problem #1

Holaszek–Magnusson, Skopje, 1972

CORRECT ANSWER: B. “After 1.♙a6 White loses very soon.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Strongest and fastest piece has no place to hide.

The move 1.♙a6?? is not good. After 1...♗×a6 2.♖×a6 f5! 3.♕c3 b5! Black is winning material. 4.♕e5 ♕b8 5.♕×b5 ♖×e5+ and White resigned.

Problem #2

Kudrin–Miles, USA, 1989

CORRECT ANSWER: C. “The move 1...♗d6 is a good one; Black equalizes.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Antipositional move not so bad.

Sometimes we can see openings like 1.e4 e5 2.♕f3 ♗d6?! played by weaker players. But here the move 1...♗d6 is played by a strong Grandmaster! And it works: 2.♕bd2 (2.♕×e5 ♗×e5 3.f4 ♗d6 4.e5 ♗c5 followed by ...d7-d6.) 2...♕×f3+ 3.♕×f3 ♕e7 4.e5 ♗c5 5.b4?! (5.♗f4!? with equality.) 5...♗b6 6.♗f4 0-0 7.♗c4 ♕g6 8.♗g3 d6! 9.e×d6 ♖e8+ 10.♗e2 ♖f6!? with initiative to Black.

Problem #3

Blumenfeld–NN, Russia, 1903

CORRECT ANSWER: A. “White, although a piece down, wins very soon.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Queen less important than bishop.

White wins quickly. 1.♖×d4 ♕×d4 2.♕f6+ ♖f8 3.♗h6#.

Problem #4

Maczulski–Kolisch, Paris, 1878

[Different sources give slightly different details.]

CORRECT ANSWER: A. “Black’s king is trapped. White wins.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Fine queen sacrifice.

No chance here for Black's pieces. **1. ♖d8+! ♜×d8 2. ♔g5+.**

Problem #5

Dvoirys–Feher, Budapest, 1991

CORRECT ANSWER: C. “White ends the attack quickly and in style.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Fine queen sacrifice.

White need play only one move, **1. ♖g5!!** and Black resigned in view of the variations 1... ♗xg5 2. ♖h8+ ♜g7 3. ♖3h7#, and 1... ♖×d5 2. ♖h8+! ♗×h8 3. ♖×d8+ ♜g7 4. ♖×h8#.

Problem #6

Troitzky, 1895

CORRECT ANSWER: A. “White is able to win.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: King and bishop alone able to checkmate.

The last white pawn seems lost, and a lone bishop cannot mate. Hence, a draw? No! Look: **1. ♔h6+! ♜g8 2. g7 ♜f7** or 2...e6+ 3. ♜d6! ♜f7 4. ♜e5! ♜g8 5. ♜f6 e5 6. ♜e6 e4 7. ♜f6 e3 8. ♔×e3 and White wins easily. **3. g8 = ♖+!!** But not 3. ♜e5? e6! with a draw. Now, though, White wins using his king, bishop, and the other side's pawns. **3... ♜×g8 4. ♜e6! ♜h8 5. ♜f7! e5** What else? **6. ♔g7#**. If you think you yourself have not enough material to win, try to utilize the forces of your opponent!

Problem #7

Gurvich [?], (conclusion of a study)

CORRECT ANSWER: B. “White can draw!”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Bishop equal to two rooks.

One possibility is resigning at once. Another is resigning only after **1. ♜c3 ♜c5**, having 2. ♔×d4+?? in mind. But whoever plays **2. ♔f2!** (or 2. ♔g1!) can be satisfied: 2... ♜d5 3. ♔×d4 is a draw, as is 2... ♖d8 3. ♔g1 (or 3. ♔e3). So, a draw in spite of White's big lack of material.

Problem #8

Hoch, 1973 (conclusion of a study)

CORRECT ANSWER: B. “White is able to win.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Strongest piece trapped by weaker forces.

The solution contains psychological pitfalls. How natural it looks to try 1.♔xh1 ♖xb5. In a tournament game this would be a good reason to go home. But here you are looking for something special, and you find **1.♔d7!!** The black queen has no place to hide on the whole board, e.g. 1...♗g2 2.♖b2+, or 1...♗h8 2.♖h5+ followed by ♖xh8. The last chance is 1...♗h3!, but now **2.♖f5+! ♖b4 3.♖f4+!** and 4.♔xh3 wins.

Problem #9

Przewoznik–Ehrenfeucht, Jaszowiec, 1984

CORRECT ANSWER: A. “White wins.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: White sacrifices last two pieces in ending.

1.hxg6!! The last two pieces are not as important as the yet-to-be-crowned third, the queen. 1...♔xc4 1...♖xe7 2.g7 ♖d8 3.g8=♗ ♖xg8 4.♔xg8 winning. **2.g7 ♖d8** 2...♖d2+ 3.♖g1 ♔e3 4.g8=♗ ♖xg2+ 5.♗xg2 ♔xg2 6.♖h7. **3.♖d7!** White has time after 3...♖g8 to play 4.bxc4. The rest is simple. **3...♖xd7 4.g8=♗ ♔d6 5.♗h8+ ♖e6 6.♗xh6+ ♖d5 7.♗d2+ ♖e6 8.♗e3 ♔f5 9.♗c3 ♖d4 10.♗c8+ ♖f6 11.g4 ♔d6 12.♗h8+ ♖e6 13.g5 ♖f4 14.g6 1-0.**

Problem #10

Lowens–Stafford, corr., 1950

CORRECT ANSWER: B. “Black wins immediately.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Under attack? Stay where you are!

In case you were wondering, the game began with a dubious line of the Petroff Defense: **1.e4 e5 2.♔f3 ♔f6 3.♔xe5 ♔c6?! 4.♔xc6 dxc6 5.e5 ♔e4 6.d3?** reaching the diagram position. Now it is sudden death. **6...♔c5!!** and White resigned in view of 7.dxe4 ♔xf2+! 8.♖e2 ♔g4+, or 7.♔e3 ♔xe3 8.fxe3 ♗h4+ 9.g3 ♔xg3.

Problem #11

Kamsky–Tiviakov, Daugavpils, 1985

CORRECT ANSWER: A. “White’s positional domination is only an illusion. Black wins.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Three antipositional moves win.

Whoever plays ...g7-g6 usually preserves his bishop on g7, so important is this piece considered to be. This is borne out by the fact that though the test position has been reached several times since, the right move was played in only a minority of cases. Here Black has an open mind.

1...♗xd4! 2.♗xd4 e6 3.♝e3 e5! Three “antipositional” moves:

- 1...♗xd4 leaves Black without his strong bishop;
- 2...e6 weakens the d6 square; and
- 3...e5 weakens d5, and also loses a tempo by ...e7-e6-e5.

But White just resigned. One more material thing – a piece is lost.

Problem #12

Alekhine–Chajes, Karlsbad, 1923

CORRECT ANSWER: B. “It is time for a winning maneuver. White wins!”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: White releases his big pin.

No tactics along the eighth rank; it is time for a decisive maneuver. **1.♖h1! ♜d7** Or 1...♜a7 2.♖g7+ ♜d7 3.♖xd7+ ♝xd7 4.♖h7 ♜d8 5.♖e7 intending 6. ♝f7. **2.♖a1!** and Black resigned. Lines for rooks!

Problem #13

Taimanov–Suetin, Kiev, 1954

CORRECT ANSWER: A. “A good positional solution brings White an edge.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: White exchanges positionally important bishop.

Another example where the strong bishop is strong precisely because it can be exchanged. **1.♗xc6+! bxc6 2.♖a4 ♖d7 3.♝f3 f6 4.♗e3 e5** White has the weak pawns on c5 and c6 under observation. **5.♝e4 ♝e6 6.♖c1 ♖b8 7.♖c2 ♗e7** Black has no compensation after 7...♝d4 8.♗xd4 cxd4 9.♖xc6. **8.♝xc5 ♗xc5 9.♗xc5 ♝xc5 10.♖xc5 ♖xb2 11.♝xe5!** and White eventually won the game.

Problem #14

Janowski–Maroczy, Munich, 1900

CORRECT ANSWER: C. “Black wins, because his king is safer.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Attack the king? Yes, but not always directly.

An extremely complex position; there are so many threats on the kingside and against the center. Black can win by 1...♙d4! 2.♖h6+ ♕e8 3.♖g7 (or 3.♖g5) 3...♗xf6!. Yet an open mind stretches further – to a corner square. **1...♗a8** In the direction of the white king! (1...♖e8 has a similar aim.) **2.♞d3** If 2.♙a7!, then 2...b6 with the consistent idea of ...♗c8-a6. **2...♗a6 0-1.**

Problem #15

Ljubojevic–Gelfand, Novi Sad, 1990

CORRECT ANSWER: B. “White has some problems with a couple of his pieces, but can find a combination leading to a draw.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Queen and knight in danger at the same time? Offer up the queen!

White is in trouble, with two of his pieces under attack. He finds a perpetual. **1.♗xf6! gxf6** 1...bxc3? 2.exf7+ ♖xf7 3.♖e6! and White wins. For example 3...♗a5 4.♖xg7+! ♙xg7 5.♗e7#. **2.♖d5! ♗a7** 3.♖xf6+ ♖d8 4.♖d5+ ♕e8 5.♖f6+ ♖d8 6.♖d5+ ½-½.

Problem #16

Schiffers–Chigorin, St. Petersburg, 1878

CORRECT ANSWER: B. “White wins immediately, because Black’s pieces are unfortunately placed.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Special offer for opponent – take everything, anything, whatever you want!

White needed only one move: **1.♞c2!!** and Black resigned, even though all White’s pieces are under attack. The threats of 2.♞xc8 mate and 2.♗xe6 are decisive.

Problem #17

Fuss–Olbrich, Bad Kissingen, 1989

CORRECT ANSWER: C. “Black wins. Two minor pieces defeat two rooks.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Two light pieces defeat two rooks.

Yes, Black wins, and White’s rooks do not help. **1...e2 2.♖a1** “2.♖b1 ♘d1 3.♖d7 ♗b3 4.♖xb3 e1=♙ 5.♖xf7 is a tougher defense for White (Black’s advantage is obvious and should be sufficient to win, but it may not be so easy)” – Karsten Mueller. ♘d1 The first rook is out of play. **3.♖d8** Hoping for 3...e1=♙? 4.♖xd5 and 5.♖axd1. **3...♗b3! 4.♖e8 ♗e6!** Now the second rook. **5.♖d8 e1=♙ 6.♖axd1 ♙e5+** and Black won.

Problem #18

Dedrie, 1921

CORRECT ANSWER: A. “White wins, but only after accurate play with his king.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Sometimes you must turn back to win a battle.

Everything seems simple, but White must avoid some traps. **1.♖b1!!** Why not active play, why retreat instead? Here is the reason: 1.♖c3?? a3! 2.b4 ♖e5 3.♖b3 ♖d5 4.♖xa3 ♖c6 5.♖a4 ♖b6 and draws. **1...a3 2.b3!** Why not make a queen as fast as possible? Why not 2.b4? **2...♖e5 3.♖a2 ♖d5 4.♖xa3 ♖c6** Ah, now we understand... With a pawn at b4 it would be a draw. Do not hurry! **5.♖a4 ♖b6 6.♖b4** and now White wins without problems or paradoxes.

Problem #19

Tal–Vaganian, USSR, 1973

CORRECT ANSWER: C. “White wins by attacking the enemy king.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Vulnerability of distant piece (unprotected ♖h8) decides the game.

White’s attack is decisive: **1.♗xc6!** Usually White waits for ...a7-a6. **1...bxc6?** (1...♗xc6 2.♗xc5 ♗xc5 3.♗xe6 etc.) **2.♙h5+!** A very useful check, weakening the long diagonal. **2...g6 3.♙f3** and Black resigned after **3...♙e7 4.♗xc5 ♙xc5 5.♙f7+ ♗d8 6.♙f6+.**

Problem #20

Schlosser–Kanchev, corr., 1967/8

CORRECT ANSWER: C. “White wins thanks to the activity of his pieces.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Fine sacrifices.

First, White enters the fortress of the enemy king by natural methods:

1. ♖xf7+! Nothing special. **1... ♜xf7** **2. ♖xg7+!!** But this is real fantasy! White wins:

- a) 2... ♖xg7 3. ♖h5+ ♜f6 4. ♖f5#; 3... ♜f8 4. ♖e6+ dxe6 5. ♖xe6#;
b) 2... ♜xg7 3. ♖g4+ ♜f7 4. ♖h5+ ♜g7 5. ♖f5+ ♜f6 6. ♖g5+! ♜xf5
7. ♖h4+ ♜f4 8. ♖g3#, or 6... ♜e5 7. ♖f4+, e.g. 7... ♜f6 8. ♖h6 ♖xh6
9. ♖e5#.

White can also play 2. ♖de6, but ♖xg7+ is stronger and needs to be played in most lines after 2. ♖de6 anyway.

Problem #21

Reti, 1921

CORRECT ANSWER: C. “It will be a draw!”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: The pawn runs, the king follows it from behind and can catch it!

White chooses the correct paths: **1. ♜g7! h4** **2. ♜f6!** Via the h8-g7-f6-e5 route the white king approaches both pawns. **2... ♜b6** Alternatively 2... h3 3. ♜e7 (or 3. ♜e6) 3... h2 4.c7 ♜b7 5. ♜d7 h1=♜ 6.c8=♜+ and draws. **3. ♜e5!! h3** 3... ♜xc6 4. ♜f4 h3 5. ♜g3 h2 6. ♜xh2. **4. ♜d6 h2** **5.c7 ♜b7** **6. ♜d7 h1=♜** **7.c8=♜+** and draws.

Problem #22

Tal–Platonov, USSR, 1973

CORRECT ANSWER: B. “Although a piece down, White has an ingenious resource and wins.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: White has a choice of captures, but prefers to sacrifice.

The position is a mate in four. Black is a piece up, but his ♖d7, ♜f8 and ♖f6 are badly placed. **1. ♖h6!** The strongest piece darts into action, forcing instant resignation, since after 1... ♖xg3 White does not take material but plays 2. ♖g6!! White is then down a pawn, bishop and rook, but he possesses a great idea – unstoppable checkmate!

Problem #23

Levitsky–Marshall, Wroclaw, 1912

CORRECT ANSWER: A. “There is a spectacular combination here. Black wins.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Surprising queen sacrifice.

One of the most famous combinations of all time: **1...♖g3!!** and White resigned at once. Examples: 2.h×g3 ♖e2♯; 2.f×g3 ♖e2+ 3.♖h1 ♖xf1♯; 2.♗×g3 ♖e2+ 3.♖h1 ♖×g3+ 4.♖g1 ♖xf1.

In fact, another surprising queen sacrifice was also possible: **1...♗e3!** attacking her sister on the other team. More examples: 2.f×e3 ♖e2+ 3.♖h1 ♖xf1♯; 2.♗×e3 ♖×e3 3.f×e3 ♖e2+ 4.♖h1 ♖xf1♯; 2.g×h3 ♗×g5+ 3.♖×g5 ♖f3+.

Problem #24

Herbstman, 1948 (conclusion of a study)

CORRECT ANSWER: C. “In spite of Black’s big advantage in material, White is able to obtain a draw.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: The loose rook cannot be taken without punishment.

Black forces are prevailing, but White’s cooperate effectively: **1.♖f5+ ♗e6 2.♖e5+ ♗d6 3.♖d5+!!** If 3...♖×d5 4.c4+ and 5.♙×a1. **3...♖c6 4.♖c5+!! ♗b6 4...♖×c5 5.c×b4+ and 6.♙×a1. 5.♖b5+!! ♗a6 6.♖a5+!!** with a draw. The key concept is cooperation!

Problem #25

Simagin–Bronstein, Moscow, 1947

CORRECT ANSWER: C. “Black loses, even possessing such a strong h2-pawn.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Surprising offer.

1.♙g5!! Why such an offer? Surely you need your bishop to checkmate? But this can still be done: **1...f×g5 2.f6. Or 1...♗×g5 2.♗d8+ ♖g7 3.♗c7+ and 4.♗×h2. 1...h1=♗ 2.♗e8+ ♖g7 3.♗g6+ ♖f8 3...♖h8 4.♙×f6♯. 4.♗×f6+ ♖g8 5.♗d8+ ♖g7 6.♗e7+ ♖g8 7.♗e8+ and Black resigned in view of 7...♖g7 8.f6+ ♖h7 9.♗f7+ ♖h8 10.♗g7♯.**

Problem #26

Tal–Klaman, Moscow, 1957

CORRECT ANSWER: C. “Black is not able to defend the position, and loses.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: In a sharp position a quiet move decides.

Black found the last trap. **1...♖a5!** Hoping for **2.♗xf8+ ♘c7** **3.♗xf6 b3!**, but White answered with matching skill. **2.♘b3!!** Now he is winning. **2...♗d5** **3.♗xf8+ ♘c7** **4.♗xf6 ♖e8** **5.♖c1 ♗a4** **6.♗d4 ♗b7** **7.♖d1 ♖e6??** **8.♗c4+** and Black resigned. Keep cool even in “hot” positions!

Problem #27

Bernstein–Larsen, Amsterdam, 1954

CORRECT ANSWER: B. “The position is even.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Knight plays more important role than queen.

The position would have been balanced had White played **1.♗d3**, when if **1...♘b4** **2.♗b1**. After **1.♗e3?** Black was better: **1...♘b4!** **2.♖c1 ♘xa2!** **3.♘xa2** **3.♖a1 ♘b4!** **4.♖xa5 ♘c2#**. **3...♗xa2** **4.♗d4e5** **5.♗c3 h5!**

Problem #28

Mott-Smith–Thompson, 19??

CORRECT ANSWER: B. “White is worse, but can attempt a swindle.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: White a piece down, but offers exchange of queens.

White’s earlier piece sacrifice (if that is what it was) does not appear to have paid off. So as a last gasp he rightly tried **1.♗e1!** (plotting **1...♗xe1** **2.♘h5#**) and was rewarded with **1...g3??** **2.♗xg3+!!** **1-0**. If **2...♗xg3**, mate follows. What should have been played was the winning **1...♗g5!** **2.♘e6+** (**2.♘g6!?**) **2...♗xe6** **3.♗xe6 ♘f6** **4.♖xf6 ♗xf6** **5.♗xg4+ ♗g5** **6.♗d7+ ♗e7** (**6...♗g8** **7.♗e6+ ♗g7** **8.♗d7+ ♗e7 transposes.**) **7.♗g4+ ♗f8!**

Problem #29

Amelung

CORRECT ANSWER: C. "The position is balanced."

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Surprising sacrifices enable Black to build a "fortress."

Some sacrifices first, then a good positional solution. **1...♙e7+!** **2.♖e8**
If White takes the bishop, Black plays a knight fork. **2...♙f6** **3.♗f2** Or
almost anywhere else; it does not really matter. **3...♙g7!** The squares f8,
f7, f6, g6, h6 are all booby-trapped. There is no entry point for the white
king. Draw.

Problem #30

Em. Lasker, 1924

CORRECT ANSWER: A. "White wins."

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: White underpromotes.

Sometimes a knight is stronger than a queen: **1.♖c8+!** **♜xc8** **2.♗xa7+!!**
2.bxc8=♚+ only draws. **2...♗xa7** **3.bxc8=♞+!!** winning.

Problem #31

Chekhover, 1947

CORRECT ANSWER: A. "A draw is inevitable."

CLASSIFICATION: TACTICS – ENDING

PARADOX: Clear rook extra not enough to win ending.

The only logical target for Black is h2, but it's not enough for a full point.
1...♜h2 **2.♗e1!!** **♜xg2** **3.♗f1** **♜h2** **4.♗g1** **♜h3** **5.♗g2** **♜h5** **6.f3**
and White is safe. Draw.

Problem #32

Pogosyants, 1976

CORRECT ANSWER: A. "White wins!"

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Usually in such positions we think: how to draw? But here
we should think: how to win!

White wins with **1.♗e4!** threatening **2.♗f2+*** and **2.♗e1***. If **1...♗f8+**
2.♗g3+ **♗g1** **3.♗g2***. Let us also see a wrong path: **1.♗d5??** **♗g8+**
2.♗xg8 – stalemate!

Problem #33

Thorbergsson–Tal, Reykjavik, 1964

CORRECT ANSWER: C. “Black can obtain a strong initiative.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Exchange of a bishop that is important from the positional point of view.

In the fianchetto formation of pawns f7-g6-h7, the bishop on g7 is not sacrosanct. We may exchange it – for a good reason! **1...♗d4!! 2.♗xd4** The bishop must be taken. **2...cxd4 3.♗g2 ♗g5!** In the direction of the white monarch. **4.♞xe7 ♗h3+ 5.♜f1 ♞xe7 6.♗d2 ♗f6! 7.♗h4 ♗g4 8.♗f3** If **8.♜g2 ♞e8!** threatening **9...♞e2+!**. **8...♞e3! 9.♜g2 ♞e7 10.♞e1** And now the position is ripe for tactical solutions. **10...♗xf4+! 11.gxf4 ♞xe1 12.♗xe1 12.♗xe1 ♗e3+.** **12...♞h4 13.♗c1** To parry **13...♞f2+** and **14...♞xh2#.** **13...♞xe1** We can see a victory for Black’s strategy. **14.h3 ♗h6 15.f5 ♗xf5 16.♗f4 ♗h4+ 17.♜h2 ♗f3+ 18.♜g2 ♗xh3+!! 19.♜xf3 ♞g1! 20.♗xg6 ♞g4+ 21.♜f2 ♞xf4+ 22.♜g1 hxg6** and White resigned.

Problem #34

Isakov–Nikitin, corr., 1947

CORRECT ANSWER: A. “Black gains a clear advantage.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Surprising queen sacrifice.

It seems like Black has no chance to escape in view of the threat: **2.♗xd7+ ♞xd7 3.♞b8#**, since if **1...♗xc6**, then **2.♞xc6+ ♞d7 3.♞b8#**. But Black retains his extra pawn and a clear advantage after **1...♞d3+!! 2.♜xd3 (2.♜e1?? ♞xb1) ♗xc6+** and **3...♗xa4**.

Problem #35

Rainer–Steinitz, Vienna, 1860

CORRECT ANSWER: B. “Black stands better.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Black voluntarily weakens his king.

Black attacks the white king while at the same time uncovering his own: **1...g5! 2.♞e6** If **2.♞d1 ♞d7 3.b4 ♗b6 4.♗b2 ♞h3**. Alternatively **2. ♞xb7 ♗e5 3.cxd4 ♞b8 4.♞d5 ♗xd4 5.♗d2 g4!** (Kusturin-Saracino, Italy, 1985). **2...♗e5 3.♞f5+ ♜g7 4.♜h1?!** If **4.♗xg5 ♞f8** with advantage to Black, e.g. **5.f4 ♞xf5 6.exf5 ♜f7. 4...♜h8 5.♞g1 g4! 6.f4 6.fxg4**

♖h4 with a decisive attack. 6...♗f3 7.♝xg4 ♖h4!! 8.♞g2 ♖xh2+!! 9.♝xh2 ♞g1#.

Problem #36

Gligoric–Smyslov, Amsterdam, 1971

CORRECT ANSWER: A. “Black can win.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Instead of a sharp, attacking move – a calm, waiting one.

Maybe your hand wanted to push the queen, rook or bishop? Wait a moment. 1...♖h7!! Zugzwang! For example: 2.♖h2 ♝xf3 3.♖xf3 ♗xe4, and there is no check at f8!; 2.♖e1 ♖f6!; 2.♞d2 ♗xe4! 3.♝xd3 cxd3! 4.♖xe4 ♖xe4 5.fxe4 d2 and 6...d1=♖. 2.♞c1 ♖f6! 3.♗e1 ♖f4. The rook on c1 is unfavorably situated, e.g., 4.♞c2 ♝xf3! 5.♖xf3 ♗xe4.

Problem #37

Doroshkevich–Tukmakov, Riga, 1970

CORRECT ANSWER: C. “Black wins.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Surprising queen sacrifice.

Incredibly, this occurred in a USSR Championship game! The start was 1.c4 e5 2.♗c3 ♗c6 3.♗f3 f5 4.d4 e4 5.♗g5 ♗f6 6.d5 exf3 7.dxc6 f×g2 8.cxd7+?? reaching the diagram position. 8...♖xd7? and 8...♗xd7? are met by 9.♗xg2, so of course Black plays 8...♗xd7!! 0-1. A piece is lost, at g5 or h1.

Problem #38

Kobaidze–Ceretelli, USSR, 1969

CORRECT ANSWER: C. “In a difficult situation Black can obtain a draw.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: An opponent attacks our piece, so we invite him to take it.

The knight is trapped: 1...♗a8 2.♗d7!. But the bishop can be trapped, too! 1...♖e8!! 2.♗xb6 ♖e7!. Draw, since a piece remains imprisoned.

Problem #39

Keres–Botvinnik, Moscow, 1941

CORRECT ANSWER: A. “Black takes the initiative and has better prospects.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: A few “antipositional” moves enable Black to take an overwhelming initiative.

First, a strong piece must be exchanged: **1...♙xc3! 2.♖xc3** Then let us weaken our kingside. **2...g5!** Castling short is risky now. **3.♙g3 cxd4!** Weakening the d5-square. **4.♖xd4 ♗c6!** At last a strong, developing move. **5.♖a4 ♙f5 6.e3 ♖c8 7.♙d3 ♖d7!** And now Black has a big advantage! **8.♖b1 ♙xd3+ 9.♖xd3 ♖f5 10.e4 ♗xe4 11.♖a1 0-0 12.♖d1 b5 13.♖xb5 ♗d4 14.♖d3 ♗c2+ 15.♖b1 ♗b4** and White resigned several moves later.

Problem #40

Kantorowich, 1952

CORRECT ANSWER: B. “White has a nice blow that wins. Pawn promotion is deferred!”

CLASSIFICATION: TACTICS – ENDING

PARADOX: White does not promote his pawn.

The position is actually a mate in nine, but you should avoid immediate promotion since that only draws! It does not even matter where the white king is placed initially; with best play Black cannot lose after **1.a8=♖?**.

1.♖h6+! ♖g1 2.♖h1+!! Be aware that all other moves only draw. After the rook sacrifice, though, Black cannot survive for long. **2...♖xh1 3.a8=♖ ♖g1 3...♖f1+ 4.♖g3+ ♖g1 5.♖a7+ ♖h1 6.♖h7+ ♖h3+ 7.♖xh3+ ♖g1 8.♖g2#. 4.♖a7+ ♖h1 5.♖h7+ ♖g1 6.♖g6+ ♖g4+ 7.♖xg4+ ♖f1 8.♖g5 ♖e1 9.♖c1#.**

Problem #41

Rusakov–Verlinsky, Moscow, 1948

CORRECT ANSWER: B. “Black wins.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Surprising queen sacrifice.

Values of pieces depend on circumstances. Here is an example. **1...♖e7!! 2.fxe7** (What else?) **2...♙g7!! 0-1.** A possible finish is **3.♖xb2 ♙xb2 and 4...♙xa1.**

Problem #42

Alekhine–Feldt, Tarnopol, 1916

[Different sources give slightly different details.]

CORRECT ANSWER: C. “White has an effective way to win.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Surprising queen sacrifice.

White finds weak points in the enemy camp. 1. ♖c6! ♙xc6 2. ♖xe6+ is pretty good, but the future world champion found **1. ♖f7!! ♗xf7** If the queen runs, then 2. ♖xe6 followed by 3. ♖h6+ ♖h8 4. ♗g8+ ♗xg8 5. ♖f7#. **2. ♖xe6! ♗g6** Other mates: 2... ♖xe6 3. ♖g5#, or 2... ♗f8 3. ♖g5 and 4. ♗f7#. **3.g4!** Correct moves through to the end! **3... ♙e4 4. ♖h4#**.

Problem #43

Chernin–Miles, Tunis, 1985

CORRECT ANSWER: A. “White takes an overwhelming initiative, and secures a clear advantage.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: When your own pawn gets in the way...

White takes an overwhelming initiative, using the e4-square for his pieces: **1.e5!** Other moves are not satisfying, e.g. 1. ♙e2 ♙xf3!? 2. ♙xf3 ♖d7 or 1... ♖d7 straight away. **1... dxe5** 1... ♖e7 2.e6! ♙xf3 3. ♖xf3 fxe6 4. ♗g6+ ♗f7 5. ♖xe6+ ♖xe6 6. dxe6 ♖c6 7. ♙c4 with a white advantage. **2. ♖e4 ♗f4 3. ♖fd2** Threatening 4.g3 ♗f5 5.h3 ♖h5?? 6. ♖d6+. **3... ♙f5 4. ♙d3 ♙xe4 5. ♖xe4 ♖d7 6.g3 ♗g4 7.h3 ♗h5 8.d6! ♗g6 8... ♗f3 9.0-0 9. ♙d1 b3 10. ♖e2! f5 11.g4!** White breaks Black’s position. The rest is easy. **11... c4 12. ♙b1 f×g4 13. ♖xc4 ♗f7 14. ♖c6** and White soon won.

Problem #44

Selesniev, 1919

CORRECT ANSWER: B. “It will be a draw.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Series of sacrifices in ending.

Stalemate saves the game. **1.d6!! cxd6 2.c5 dx c5 2... bxc5 3.b6. 3. ♗xe3!!** With stalemate after 3... ♗xe3. **3... ♗h4 4. ♗h3!!** The same stalemate follows 4... ♗xh3. **4... ♗h7 5. ♗e3** White wants to checkmate! **5... ♗h4 6. ♗b3** – a draw.

Problem #45

Gufeld–NN, simul., 19??

CORRECT ANSWER: A. “White finds an effective way to gain the advantage.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: A sacrifice – and five black pieces can take “The Heroic Knight.”

Suddenly White sacrifices his knight **1. ♖e5!!**, which he had to do. After any of 1... ♗xe5, 1... ♝2xe5, or 1... dxe5, then 2. ♖xf7+ ♕h8 3. ♖f8+ ♝xf8 4. ♝xf8+ ♕h7 5. g6#. If 1... ♗xe5, then 2. ♖xe2 hxg5 3. ♝xg5 when White is better despite the black knight being so well placed.

Problem #46

Reti, 1922

CORRECT ANSWER: A. “White wins.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Short-legged knight catches long-legged bishop.

1. ♖d4+ ♗c5 1... ♖b7 2. ♖xh2 ♗a6 3. ♗b3 ♙f4+ 4. ♕h3 ♖b5 5. ♖g4 ♙b8 6. f4 ♖b4 7. f5 ♖xb3 8. f6 and White wins. After 1... ♖c5, White neither plays into the center, nor takes the pawn – 2. ♖xh2?? ♙f4+ 3. ♕h3 ♖xd4. The right way is **2. ♖h1!!** leaving Black in Zugzwang. If the bishop moves, it can be forked by the knight.

Problem #47

Przewoznik–Stoica, Slatni Piasytsy, 1981

CORRECT ANSWER: A. “White has the upper hand.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Instead of attacking moves, two calm ones decide.

1. h3!! A paradox! Though a rook down, White neither attacks nor pursues material. If 1. ♝xe4 ♖xa3! 2. ♖xa3 ♝d1+. **1... ♗a4! 2. ♖h2!!** He does not attack yet. 2. ♝xe4 ♖d1+; 2. ♖xe4 ♖xc4 3. ♖f3 ♖h4. **2... f5** Black has no good choice: 2... ♖h7 3. ♖xf7+ ♖xh6 4. ♝xe4 ♝xc4 5. ♖f4+ g5 (5... ♖h7 6. ♝xc4 and White wins.) 6. ♖f6+ ♖h7 7. ♖e7+; 2... ♖d7 3. ♝xe4 ♖e7 4. ♖g4 and ♙h6-g5-f6, ♖g4-h4-h8#.

3. exf6 ♖f7 3... ♗d6 4. f7+! ♗xf7 5. ♖f6! ♗xh6 6. ♖xg6+ ♖f8 7. ♖xh6+ ♖f7 8. ♖xe6+ ♖g7 9. ♖e7+! and the black king is helpless. **4. ♝xe4 ♖d1** **5. ♖g3** intending ♙h6-g5, ♝e4-h4-h7, ♖g3-h4, etc. **5... ♝c5** **6. ♙e3!**

♖f5 7.♖h4 ♖xf6 7...♖h5? 8.♖xh5 ♖xh5 9.♖c7+ winning. 8.♖c7+ ♖d7 9.♖h7+ ♖e8 10.♖c8+ ♖d8 11.♖h8+ ♖e7 12.♖xd8 ♖xd8 13.♖xd8+ ♖xd8 and Black resigned in view of 14.♖g5 ♖e7 15.♖g3 ♖f7 16.♖xf6 ♖xf6 17.♖f4.

Problem #48

I. Sokolov–Cigan, Maribor, 1990

CORRECT ANSWER: C. “White wins.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Main forces at home, but attack still possible.

Development does not play a role here. **1.♖xe5!!** The game is over. **1...dxe5 2.♖d8+ ♖f7 3.♖xg7+! ♖xg7 4.♖e7+ ♖f7** After 4...♖g8 or ♖g6 the decisive plan is 5.0-0-0 and 6.♖g1+. **5.♖f5+ ♖g8 6.♖g5+ (6.♖d1 also wins) 6...♖f8 7.♖g7+ ♖e8 8.♖xe5+ ♖d8 9.♖e7+ ♖c8 10.♖xf7 1-0.**

Problem #49

Larsen–Berger, Amsterdam, 1964

CORRECT ANSWER: A. “White is clearly better.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Rook does not play a role.

The game started **1.e4 e5 2.♖c4 ♖f6 3.d3 d5 4.exd5 ♖xd5 5.♖f3 ♖c6 6.0-0 ♖g4 7.♖e1 ♖e7 8.h3 ♖xf3 9.♖xf3 ♖d4** reaching the diagram position. White is clearly better, but he must play brave chess!

10.♖g4! Weaker was 10.♖d1, or 10.♖xd5 ♖xd5 11.♖xd5 ♖xc2. **10...0-0** White’s sacrifice was sound. 10...♖xc2 11.♖xe5 c6 12.♖xg7 ♖f8 13.♖xd5; 10...♖f6 11.♖xg7 ♖d7 12.♖xe5; the only chance for Black was to settle for 10...♖d6 11.♖a3! 0-0 12.c3 ♖e6 13.♖b5. **11.♖xe5 ♖f6 12.♖d1 ♖d6 13.♖e1 ♖e8 14.♖e3** and White realized his advantage.

Problem #50

Zakhodyakin, 1930 (conclusion of a study)

CORRECT ANSWER: B. “Draw.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Bishop no worse than queen – even in an ending!

White survives. **1.♖c5!! f1=♖ 2.♖h6+ ♖h8 3.♖d6!!** After 4.♖e5, three pieces – ♖h8, ♖g7, h7 – are out of play. When the black queen

takes the bishop on d6 or e5, then ♖h6-f7+.

Problem #51

Alekhine–Verlinsky, Odessa, 1918

CORRECT ANSWER: A. “White wins.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: “Passive” move wins.

White is in trouble, though one piece up! For example, 1.♖cd1 ♖×d6! 2.♖×d6 ♖f1 ♯, or 1.♖c4 ♖×c4 2.♖×c4 ♖×d6. He could play 1.♖g6+ h×g6 2.♖h3+ ♖g8 3.♖e6+ ♖h8 4.h4!, but the single other real alternative wins on the spot: **1.♖d1!! ♖a5** 1...♖×d1 2.♖×c7. **2.♖×e2 ♖×e5 3.♖d5 1-0.**

Problem #52

Aratovsky–Podolsky, USSR, 1949

CORRECT ANSWER: A. “White has compensation for the two pawns.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: White plays the strange move 1.♖b4-f8 in the opening.

White has compensation. **1.♖f8!** Usually you would think that this is the place for a black bishop.

1...♖f6 Alternatives:

- a) 1...♖×f8 2.♖d8 ♯;
- b) 1...♖a5+ 2.b4! ♖×b4 3.♖×g7 ♖c2+ 4.♖f1 ♖×a1 5.♖×h8 with an extra piece;
- c) 1...♖e7! 2.♖×g7 ♖g8 is the critical line, though White appears to have enough recompense after 3.♖d6! ♖c5 (3...♖×f3?? 4.0-0-0.) 4.0-0-0 ♖×d6 5.♖×d6 ♖f5 6.♖d8+! ♖×d8 7.♖f6+ and 8.♖×g8.

2.♖×g7 ♖g8 and now (in place of **3.♖d4?**) Aratovsky suggests that White should have played 3.♖d4! ♖×g7 (3...♖×f3 4.♖×f6 ♖×g1+ 5.♖×g1 winning; 3...♖b4 4.♖×f6 ♖×f6 5.♖×f6 ♖×g1+ 6.♖×g1 ♖c2+ 7.♖d2 ♖×a1 8.b4! with advantage to White; 3...e5 4.♖d6 ♖e6 5.♖×f6 ♖×g1+ 6.♖×g1 ♖×f6 7.♖×c6+ b×c6 8.♖×c6+ ♖e7 9.♖×a8 winning – analyses by Aratovsky.) 4.♖×g7 ♖×f3 5.0-0-0 ♖d7 6.♖f4! ♖e7 (6...♖b4 7.♖×f6! ♖×a2+ 8.♖d2! Eventually Black will run out of checks: 8...♖×f2+ 9.♖d3 ♖f3+ 10.♖d4 ♖×d1+ 11.♖d3! e5+ 12.♖×e5+ ♖e6 13.♖d6 c5+ 14.♖e3 with a won game.) 7.♖d6+ ♖e8 8.♖dg1 and White is winning.

Incidentally, the position arose from the Semi-Slav Defense where the idea of a white bishop landing on f8 without capturing anything can also be seen in a related line – 1.d4 d5 2.c4 e6 3.♖c3 c6 4.e4 d×e4 5.♖×e4

♙b4+ 6.♘d2 ♜×d4 7.♙×b4 ♜×e4+ 8.♚e2 ♚a6 9.♙f8!? An example of a closely analogous solution.

Problem #53

Tolush–Botvinnik, Leningrad, 1939

CORRECT ANSWER: C. “Black will take the initiative.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: In a sharp game the knight can be better than a rook.

White starts with **1.♙c7!?** Having in mind **1...♜×c7 2.♚×d5 ♜d7 3.♙d1 e6 4.♚c7!**, alternatively **3...♚c6 4.♜e2!** (or **4.♙b5**, but not **4.♜c2 ♚d4**). **1...♜×c7 2.♚×d5 ♙×d5!** Now it is Black’s turn! He takes the initiative. **3.♜×d5 ♘e6 3...♚c6** is more precise. **4.♜d2 (4.♜d3!?) 4...♚c6 5.♙d1 ♙d8 6.♜c1 ♜a5+ 7.♙d2 ♙d5! 8.♚e2 ♙×c5 9.♚c3 ♘×c3 10.♙×c3 ♙×c3 11.♜b2 ♙a3 12.♜b5 ♜c3 13.♜b2 ♜c5 14.♜b1 ♘×a2 15.♙×a2 ♜a5+ 16.♙d2 ♙a1** with a decisive advantage.

Problem #54

Razuvaev–Lputian, Frunze, 1979

CORRECT ANSWER: A. “Black’s king is weak; therefore White wins.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Surprising knight sacrifice.

In such sharp positions, material does not play an immediate role. Hence, let us sacrifice, having these strong pieces in reserve – ♜g5, ♙d6, and ♙b2! White played **1.♚d7!! ♜×d7** Other moves: **1...♚×d7 2.♙h6#; 1...♘×d7 2.♙×f6 ♘×f6 3.♘×f6** with mate on g7 or h5; **1...♙×d7 2.♙×f6 ♙d6 3.♙h6+ ♙×h6 4.♜g7#. 2.♙×d7 ♘×d7 3.♘×f6 ♘×f6 4.♜×f6 ♙×c4 5.♜e7 1-0.**

Problem #55

Klebanov–Kalinichenko, USSR, 1970

CORRECT ANSWER: C. “Black is winning.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Black must hurry, but decides to “waste” time.

These are the possibilities.

- a) Black loses after **1...♘f3? 2.♘×f3 ♜×f3? 3.a7**, because White threatens to queen with check. The new queen will eventually capture one pawn and can give herself up for the other, and then the b-pawn will

march home to victory.

- b) Black draws after 1...♙f3? 2.♙xf3 g2! 3.a7 g1=♚ 4.a8=♚ ♚a1+.
- c) Black wins after the game continuation **1...♙h1! 2.b5** 2.♙xh1 g2 3.♙xg2 h×g2 4.a7 g1=♚ 5.♚a6 (5.a8=♚ ♚a1+.) 5...♚g2 6.b5 ♚e5 7.b6 ♚c6. **2...g2 3.b6** 3.a7 g1=♚ 4.a8=♚ ♚a1+ 5.♚b6 ♚x a8. **3...g1=♚ 4.♙xh1 ♚xh1 5.b7 ♚b1 0-1.**
- d) Black also wins after 1...♚e5 2.♚b6 ♚d6 3.a7 ♙x b7 4.♚x b7 h2 when now it is Black who threatens to queen with check.

Problem #56

Lake [?], 1930

CORRECT ANSWER: B. “Suddenly everything ends in a draw.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Knight no worse than queen, even though in an ending.

After 1...♚xg6 2.♙f4+ and 3.♙xh3 is a draw. Also 1...♚g8 2.♙e7+ ♚f8 3.♙f5 h2 4.♙g3 leads to the same result. If 1...♚h6, then 2.♙e3! (*with the idea of 2...h2 3.♙g4+*) 2...♚xg6 3.♙f1. Therefore? Only **1...♚h8**. But this is not enough: **1...♚h8 2.♙e7! h2 3.♙d5 h1=♚+ 4.♚e6** – draw! Another example where a minor piece and king are not inferior to a queen and king.

Problem #57

Vorobiev–Goliak, corr., 19??

CORRECT ANSWER: A. “White has an attack that will give him an advantage.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Little pawns decide the game in big style!

White plays on an elevated strategic plane. **1.b4!!** 1.♙xc6+ ♙xc6 2.♙e1 ought to be good as well, but it can get messy, e.g. 2...♙e5 3.b4 ♙d6 4.d4 0-0-0 5.d×e5 ♙xb4. **1...♙b6** Alternatives: 1...♙xb4 2.d4 0-0-0 3.c3; 1...♙xb4 2.c3 ♙a5 3.d4 0-0-0 4.f6 and 5.♚a4, with White better in both cases. **2.b5 ♙d4 3.c3! ♙xb5 4.d4** Clearly a game of white pawns, though more accurate is 4.a4! ♙d6 5.a5. **4...0-0-0 5.a4** 5.♚b3 is even better. **5...♙xd4? 6.a×b5 ♙xc3 7.♙xa7! c6 8.b6 1-0.**

Problem #58

Jimenez Zerquera–Larsen, Mallorca, 1967

CORRECT ANSWER: B. “Black is slightly better.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Brave positional solution – 1...♗×e5!

There will be no mate on g7; so, let us without prejudice exchange the strong bishop. **1...♗×e5!! 2.d×e5 d4** White’s queenside pawns are weak, and Black should play against them. **3.♗h6 ♜f8 4.♗×e6 f×e6 5.♞fe1 ♞d5 6.♗f4 ♞f8 7.g3 ♞f5 8.♞ad1 8.h4 d3 9.♞d2 ♞d8!** with the idea of 10...♘×e5. **8...♞b3! 9.h4 ♞×a4 10.♞e4 ♞b3 11.c×d4 ♞×b2 12.♞b1 ♞×d4 13.♞×b7 ♞d×e5!** and Black went on to win.

Problem #59

Motor, 1972

CORRECT ANSWER: B. “Draw.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Rook forces opposing pawn to promote.

1.♞g2!! Black is forced to promote his pawn – and with check! **1...e1=♞+ 2.♞f7** White’s idea is clear; there is no check, and Black’s h-pawn does not help. **2...h5 3.♞g8+ ♞h7 4.♞g7+!! ♞h6 5.♞g6+ ♞h7 6.♞g7+ ♗×g7** stalemate! **2...♗g7** with a cruel proposal: **3.♞×g7 ♞e7+! 4.♞×e7 ♞×g7. 3.♞e2!!** The rook works very hard. If the queen flees, then **4.♞e8+ ♗f8 5.♞×f8#**; if **3...♗c3**, then **4.♞g2!!** Draw.

Problem #60

A. Petrosian–Hazai, Belgium, 1970

CORRECT ANSWER: C. “White is clearly better, but must be careful – Black has some tricks at his disposal.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Fine and surprising queen sacrifice.

Black played with great fantasy. **1...♞b6!! 2.♘×b6+?? 2.♞e2!** was better, with the idea of ♘a4-c3, a3-a4, ♘c3-b1-d2-b3, ♞d2. Black’s plan ...♗g3-h2-g1-d4 could be stopped by a timely ♞e2-f1. **2...c×b6 3.h4** Against ...h5-h4. **3...g×h4 4.♞d2 h3! 5.g×h3 h4** A positional draw.

Problem #61

Hass–Przewoznik, Kule, 1983

CORRECT ANSWER: B. “Black puts White’s kingside under heavy pressure, and wins.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Black does not take a piece.

Black does not grab the bishop on a1. He prefers to go for the king.

1...g5!! 2.e6 2.♖d2 ♖xa1 3.♜e2 ♜b7! 4.♞d6 ♞g1 with the idea ...g5-g4+ and ...♞g2; 2.♞d4 ♞c2!! 3.♞xe4 ♞xf2 4.♞d4 g4+ 5.♞xg4 fxg4+ 6.♜xg4 ♖xa2 winning. **2...♞c2 3.♞d2 ♜g6 0-1**. White resigned in view of 4.♞xc2 ♜h5! 5.♜e2+ g4+ 6.♜xg4+ fxg4#. Black could also have won with 3...g4+ 4.♜h4 ♜xe6, or 3...♞xd2 4.♜xd2 ♜f3.

Problem #62

Stein–Webb, Birmingham, 1976

CORRECT ANSWER: B. “White can win.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: In a sharp battle White keeps his cool – and castles unexpectedly.

The straightforward 1.♗d6+! ♗xd6 2.♜xc6+ (or 1...♜d7 2.♗xd4) wins easily enough, as does 1.Nc7+, but White decides to secure his king first.

1.0-0-0 ♖b8 1...♜d8 2.♗bxd4. **2.♗fxd4** 2.♗c7+!. **2...♗xd4** 2...♗d7 3.♗xc6. **3.♗d6+ ♜d8** 4.♗e4 ♜e5 5.♞xd4+ ♜e7 6.♗xc4 f5 7.♜xa7+ and here White is safely two pawns up (though later he blundered and lost).

Problem #63

Koskinen–Kasanen, Helsinki, 1967

CORRECT ANSWER: C. “Black wins.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Series of fine sacrifices.

If your position seems irrational to you, then play in an irrational manner! **1...♜xb4+!! 2.♗xb4 ♞d2!!** Mate is inevitable: 3.♞xd2 axb4#; 3.♗xd2 axb4# or ...♗c2#; 3.♜xd2 ♗c2+!! 4.♜xc2 axb4#. Mate every time.

Problem #64

Nikolaevsky–Taimanov, Tbilisi, 1967

CORRECT ANSWER: C. “The game should end in a draw.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Interesting stalemate at Black’s disposal.

The main thing is to find an idea! Black saves his position. **1.♖f2 ♖f6 2.♖g3 ♖g5 3.♖h3 ♖f5 4.♖h4 ♖g6 5.d6!** The only chance to win the h-pawn. **5...♖f6 6.♖×h5 ♖e6 7.♖g5 ♖×d6 8.♖f5** It seems the game is over. **8...♖c6! 9.♖e5 ♖b6 10.♖d5 ♖a5!!** The final thrust. **11.♖×c5 ½-½.** Stalemate!

Problem #65

Hoffmann–Petrov, Warsaw, 1844

CORRECT ANSWER: C. “White’s king is very weak, therefore Black wins.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Castling under fire.

Here is how it arose (without commentary). **1.e4 e5 2.♟f3 ♟c6 3.♟c4 ♟c5 4.c3 ♟f6 5.d4 e×d4 6.e5 ♟e4 7.♟d5 ♟×f2 8.♖×f2 d×c3+ 9.♖g3 c×b2 10.♟×b2 ♟e7 11.♟g5 ♟×d5 12.♟×f7** reaching the diagram position. Black has a certain problem to solve – two heavy pieces are under fire. **12...♖×f7 13.♖×d5+ ♖e8 14.♖×c5 ♖g5+ 15.♖f2 b6!** seems surprisingly okay for him, but there is something better (otherwise we would not have used it as a test position!). **12...0-0!!** The rook at f8 is more important than the queen on d8. **13.♟×d8 13.♖×d5 ♖×f7 14.♖×c5 ♖g5+ 15.♖h3 d5+ 16.e6 ♟×e6+ 17.g4 ♖×g4#. 13...♟f2+ 14.♖h3 14.♖g4 ♖f4+ 15.♖g5 h6+ 16.♖h5 ♖h4+ 17.♖g6 ♟e7#. 14...d6+ 15.e6 15.g4 ♟f4#. 15...♟f4+ 16.♖g4 ♟×e6 17.♟×e6** There is no time for **17.♖d5 – 17...♖f4+ 18.♖h5 ♖h4#. 17...♟×e6+ 18.♖g5 ♖f5+ 19.♖g4 h5+ 20.♖h3 ♖f3# 0-1.** A tale of the vagabond king.

Problem #66

Nimzowitsch–Alekhine, Dresden, 1926

CORRECT ANSWER: B. “Black has an ingenious resource – and a strategic advantage.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: An advantageous position reached with an anti-positional move.

Black can gain the positional ascendancy! **1...g5!** At first this seems suicidal as it gratuitously opens lines of attack to f6 and f7. However, the stronger attack, as Alekhine shows, is Black's! As the game continues, White has problems with the weak pawn at e5. **2.♟f3 2.♞d3 gxf4 3.♞xf4 ♞h6!** Schula–Stocek, 1997. **2...gxf4 3.♞xf4 ♖c7 (3...♞g8!?) 4.♞d3 ♞d7 5.0-0 0-0 6.a3 ♞e8! 7.♖e1 ♞g8 8.♖h4 h6!** Black is doing well (though later he lost his way, and the game was drawn).

Problem #67

Vera–Smyslov, Barcelona, 1990

CORRECT ANSWER: A. “White wins.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Startling piece sacrifice.

White scores by thinking of the unexpected. **1.♞c6!!** The vanishing piece hits him where it hurts! The e-file is decisively opened. **1...♞xc6** It is possible for the black king to flee the e-file, but not to save his skin: **1...♖f8 2.♞d5! ♞xd5 3.♞g6+!!** with forced mate to follow, e.g. **3...♖g7 4.♞e7+ ♖h8 5.♞g8+ ♖h7 6.♖e4+f5 7.♖xf5+ ♞g6 8.♖xg6#. 2.♞xc6+!** Certainly not **2.♞c4+? ♞e4+**. Remember your opponent's chances for fantasy. **2...♖f8 3.♞xb8 ♖xd4 4.♖g3 ♞c5 5.♞d1 ♖e5 6.♖xe5 ♞xe5 7.♞d7+ ♞xd7 8.♞xd7 ♞h5 9.♞d2 ♖g7 10.♖c2 ♞h3 11.♞f2 h5 12.♞e4 1-0.**

Also winning is ♠ **1.♞d5+ ♞xd5 2.♞xd5, ♠** which threatens ♠ **3.♞c6+ ♖f8 4.♖xe8+! ♖xe8 5.♞g8+ ♖d7 6.♞d8#.**

Problem #68

Simkhovich, 1927

CORRECT ANSWER: B. “White must fight for a draw – successfully.”

CLASSIFICATION: STRATEGY – ENDGAME

PARADOX: Bishop no worse than queen.

White has to struggle for the draw. He must, however, invent a sadistic little dance. **1.♞g4+ ♖d6 2.♞f5!** A vital diagonal. **2...♞a2!** Black must eliminate the obstruction; after capturing the b-pawn he will target the a-pawn. **3.♞xa2!! bxa2 4.♖c1 a1=♖+ 5.♞b1!** and White simply plays ♖c1-c2-c1-c2-c1 with a draw. The mighty nine-point queen stands on a1 like a pawn.

Another drawing possibility seems to be ♠ **1.♞xc4 ♞b1 2.♞d3 ♞xb2 3.♞e2, ♠** but since the rook will not necessarily get trapped we prefer the more clear cut ♠ solution above.

Problem #69

Smyslov–Darga, Amsterdam, 1964

CORRECT ANSWER: C. “White can obtain a better position, due to an interesting maneuver.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Passive rearrangement of pieces gives advantage.

It all seems too quiet, but White’s maneuver quickly gives him a ferocious initiative. **1. ♖d2!** Calling home a developed piece – that surely deserves an exclamation mark. **1... ♜d8 2.e3!** White finds time to wall in his bishop! But all this has an important point. White plans the regrouping e2-e3, ♖g2-f1-b5, and a timely f4 to prevent counterplay with ... ♗e8, ...f6, ...g5. **2... ♗e8?** A big mistake, overlooking the central blow. **3.e4! d×e4 3... ♗df6 4.e5 ♗d7 5. ♖f1** followed by ♖b5 and ♗a4 with a big plus. **4. ♖×e4 ♜c4 5. ♗b5 ♜×c1+ 6. ♜×c1 ♗c5 7. d×c5! ♜×d2 8. c×b6 ♜×b2 9. a4 ♗f8 10. ♜c8 1-0.**

Problem #70

Portisch–Fischer, Santa Monica, 1966

CORRECT ANSWER: A. “Black is slightly better.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: The hostage can be abandoned.

The imprisoned rook on a8 needs no protection. The initiative is more important. Here is the proof. **1... ♜d7!! 2. ♖a3 ♜e8 3. ♖d3 f5 4. ♜×a8?** 4. ♜e2!? with a slightly worse position. **4... ♗c6 5. ♜×e8+ ♜×e8 6. 0-0 ♗a5 7. ♜ae1 ♖×c4 8. ♖×c4 ♗×c4 9. ♖c1 c5 10. d×c5 b×c5 11. ♖f4 h6! 12. ♜e2 g5 13. ♖e5 ♜d8 14. ♜fe1 ♗f7 15. h3 f4 16. ♗h2 a6 17. ♜e4 ♜d5!** and Black realized his advantage.

Problem #71

Przewoznik–Manolov, Katowice, 1976

CORRECT ANSWER: A. “White wins.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Surprising sacrifices.

1. ♜e8+! ♗a7 2. ♗c6+!! The point! **2... b×c6 3. ♜×c7#** means Black has no time for **3... ♜d1+**; **2... ♜×c6 3. ♜×g4 ♖×g4 4. d×c6** are irrelevant exchanges that do not affect White’s superiority; if **2... ♖×c6 3. ♜×g4** winning. **2... ♗b6 3. ♜e3+ ♗b5 4. a4+**. White won after **4... ♜×a4 5. ♗d4+ ♗c4 6. ♜e2+ ♗b4 7. ♜d2+ ♗c4 8. ♜e3** etc. Better was **4. ♜e4!**, e.g.

4...♖d1+ 5.♜b2 bxc6 (5...a5 6.a4+ ♜a6 7.♞a7#.) 6.♞b4+ ♜a5 7.♞b6#.

Problem #72

Herbstman and Kubbel, 1937 (conclusion of a study)

CORRECT ANSWER: A. "Black runs out of steam and is not able to win."

CLASSIFICATION: TACTICS – ENDGAME

PARADOX: Unusual battle of knights.

We enter a strange study. 1...♗e3+ 1...e1=♖ 2.♗f3+ and 3.♗xe1 with a draw; 1...♗f4+ 2.♜h1 e1=♗ 3.♗f3+! ♗xf3 stalemate. 2.♜h3 ♗f4+ 3.♜h2 ♗g4+ 3...♗f1+ 4.♜h1 draws as above, while 3...e1=♗ 4.♗f3+! ♗xf3+ 5.♜g3 is also clear. 4.♜h1 ♗f2+ Black can also choose between two stalemates after 4...e1=♖, or 4...e1=♗ 5.♗f3+ ♗xf3. 5.♜h2 e1=♗ Thanks to Troitzky we know that three knights win against one, but... 6.♗f3+!! ♗xf3+ 7.♜g3 ♜e3 Stalemate? Yes, stalemate.

Problem #73

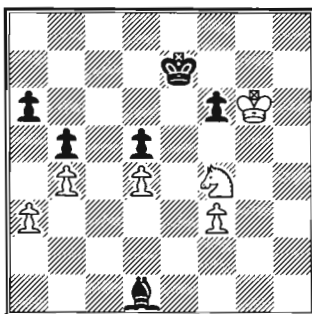
Karpov–Kasparov, Moscow, 1984

CORRECT ANSWER: A. "After 1...g×h4 White wins."

CLASSIFICATION: STRATEGY – ENDGAME

PARADOX: White declines automatic exchange.

Even the then world champion and his seconds missed White's reply after 1...g×h4? – 2.♗g2!! Now White is able to penetrate into the enemy camp. 2...h×g3+ 3.♜×g3 ♜e6 4.♗f4+ ♜f5 5.♗×h5 ♜e6 6.♗f4+ ♜d6 7.♜g4 ♗c2 8.♜h5 ♗d1 9.♜g6 ♜e7



10.♗×d5+? Since the d5-pawn is more of a hindrance to Black than to White, the latter should play 10.♗h5!! ♗xf3 11.♗xf6. 10...♜e6? 10...♜d6!? 11.♗xf6 ♗xf3. 11.♗c7+ ♜d7 12.♗xa6 ♗xf3 13.♜xf6 ♜d6 14.♜f5 ♜d5 15.♜f4 ♗h1 16.♜e3 ♜c4 17.♗c5 ♗c6

18. ♖d3 ♗g2 19. ♖e5+ ♜c3 20. ♖g6 ♜c4 21. ♖e7 ♗b7? 21... ♗h1
22. ♖c8 ♜d5. 22. ♖f5 ♗g2 23. ♖d6+ ♜b3 24. ♖xb5 ♜a4 25. ♖d6
1-0.

Problem #74

Ravinsky–Kotov, Leningrad, 1949

CORRECT ANSWER: C. “White’s threats are not dangerous – Black is better.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: King wanders into center.

Black’s king is very brave here. 1... ♜f7!! 2. ♖g3 ♜e7! A better place for the king – in the center! 3. ♜e2 h5! Now thoughts turn to the enemy king. 4. ♖xh5 ♜h8 5. ♜xg4 ♜xh5! 6. ♜xh5 ♜h8 7. ♗h7 ♗e4! 8. f4 ♜b2 9. ♜xg5+ ♗f6 10. ♜xf6+ ♜xf6 and Black went on to win.

Problem #75

Sobolevski, 1951

CORRECT ANSWER: A. “White can win easily.”

CLASSIFICATION: STRATEGY – ENDGAME

PARADOX: Original rotation of position.

White must avoid some traps. 1... ♗h6! 2. ♖g5 ♗g7! With two knights alone, the position would be drawn. 3. ♖e7+! 3. ♗e7? ♗f6! 4. ♗xf6 stalemate; 3. ♗d8? ♗f6! 4. ♖e7+ ♜f8 5. ♖h7+ ♜e8 and a draw. 3... ♜h8 3... ♜f8 4. ♖e6+ ♜f7 5. ♗xg7 winning. 4. ♖f7+ ♜h7 The position after move 2 is rotated – with what outcome? 5. ♗h4! Help yourself! 5... ♗f6! 6. ♖g5+ ♜h6 7. ♖g8+ ♜h5 Now the white king enters the game. 8. ♖xf6+! ♜xh4 9. ♖f3#.

Problem #76

Alekhine–Tarrasch, Mannheim, 1914

CORRECT ANSWER: A. “White is better.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: White prefers longer route to d4.

The best square for the knight is of course d4 – though not at once. 1. ♖g5! h6 Black must be careful with the e4-pawn, e.g. 1... ♖e5 2. ♗b3! ♗f5 3. ♗a4+ ♜f8 4. ♗c2!. 2. ♖h3 ♜e5 Better was 2... ♖e5 3. ♖f4 ♗f5 4. h3 h5 5. ♗b3 ♜c8 6. c4 followed by ♖f4-e2-d4 and an advantage. 3. ♜c1 ♖g4 4. ♖f4! g5 5. h3 ♖g6 6. ♖e2 ♖xd5 7. ♗xd5 ♜xd5 8. ♖d4

At last! Now the f5-square is the decisive factor. **8...♖e5 9.♘c4 ♗d5 10.♘f5! ♜f8 11.♘f×d6** White soon wraps things up. **11...♞h7 12.♞d1 ♗c6 13.♞d4 b5 14.a×b6 ♙b7 15.♘a5 1-0.**

Problem #77

Janowsky–Capablanca, New York, 1916

CORRECT ANSWER: A. “Black has an interesting maneuver.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Passive set up enables Black to obtain an advantage.

The diagram position has been reached quite often. Black stands worse, but of course still has to find a practical continuation. Players most often choose ...f6 and/or ...e6 – unless they have learned something from Capablanca, who played the “illogical” **1...♙d7!?** In fact, this retreat will ensure support for an eventual ...b6-b5. **2.♙e2 2...♙b5!** would be more to the point. **2...e6 3.0-0 ♙d6 4.♞fc1 ♜e7 5.♙c3 ♞hc8 6.a3?** Weakening the b3-square. **6.♘e5** was an improvement. **6...♘a5! 7.♘d2 f5! 8.g3 b5! 9.f3 ♘c4 10.♙×c4 bc4 11.e4 ♜f7 12.e5?** Superior chances were offered by **12.exd5 exd5 13.f4** and **♘d2-f3-e5**. **12...♙e7 13.f4 b5.** Black is clearly better, owing to the plan ...b5-b4 and ...g7-g5.

Problem #78

Tal–NN, USSR, 1958

[Different sources give slightly different details.]

CORRECT ANSWER: B. “White can win.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: White avoids automatic moves.

No automatic thinking – play like Tal! **1.g×f6!!** Offering the exchange? **1...♞×d1+ 2.♘×d1!!** Another unexpected decision. **2...♗×d2 3.f×g7!!** Now everything is clear. **3...♙e6 4.g8=♗+ ♜d7 5.♗×c8+! 1-0.**

Problem #79

Timman–Kasparov, Bugojno, 1982

CORRECT ANSWER: B. “In a difficult situation Black can draw.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Quiet move in sharp battle.

A “quiet” move troubles White. **1...♗c6!!** Checks on the a- and b-files were also attractive, e.g. **1...♗b7+ 2.♜a1 ♗a6+ 3.♘a2 ♞d3**, but then White would have had the counter-blow **4.♞xh7!! ♞×e3 5.♞×g7+ ♜×g7 6.♗e7+ ♜g8 7.♘h5! gxh5 8.♗g5+ and 9.♗×e3, or 4...♜xh7 5.♗f7 and**

6.♖h1; White is winning in all lines. 2.♗c2 ♖d2+ ½-½. After 3.♗x d2 ♗xe8 4.♗d5, Kasparov gives 4...♗e6 5.♖xc4 ♗xd5 6.exd5 ♗b5 7.♖c5 ♗b2+ 8.♖c2 ♗b4+ 9.♗e2 ♗b5+ 10.♗f2 ♗xd5 with equality.

Problem #80

Sax–Seirawan, Brussels, 1988

CORRECT ANSWER: A. “Black can capture the e6-pawn, which would give him an even game.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Unexpected queen sacrifice.

The game commenced 1.e4 d6 2.d4 ♗f6 3.♗c3 g6 4.f4 ♗g7 5.♗f3 c5 6.♗b5+ ♗d7 7.e5 ♗g4 8.e6 reaching the diagrammed position. The move 8...f×e6! was awarded the title of the most important novelty of *Chess Informant* #45. Perpetual check concluded the game. 9.♗g5 ♗×b5 10.♗×e6 ♗×d4! 11.♗×d8 ♗f2+ 12.♗d2 ♗e3+ ½-½.

Problem #81

Varavin–Golitsyn, USSR, 1990

CORRECT ANSWER: C. “In such sharp positions time is the most important factor. Therefore, White to play wins.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Fine queen sacrifice.

Perhaps you were looking for mates on the 8th rank? But that is not the end of the story! Good tacticians should have broader horizons: the f-, g- and h-files; the 2nd, 3rd, 5th, 6th and 7th ranks; the h3-c8, h1-a8, a4-e8 and a6-c8 diagonals are also important. Let us have a look.

1.♗×d5!! ♗×d5 Or 1...♖b×d5 2.♖b2+! ♖b5 3.♖b5+ ♖×b5 4.♖xg8+ winning; or 1...♗×d4+ 2.♗×d4 ♖xg3 3.♗×b5 and White should win easily. 2.♖f8+ ♗b7 3.♗c8+ ♗a8! 3...♗b8 4...♗a6+ ♗d8 5.♖×d8#; 3...♗c6 4.c×d5+ ♖b×d5 (4...♗×d5 5.♖xg5+) 5.♖c3+ and 6.♖×h8, when White is winning. 4.♗e6+! ♗b7 5.♗×d5+ ♖b×d5 5...♖g×d5 6.♖×h8 – White wins. 6.♖b3+! ♗a6 7.c×d5 ♗×d4+ 8.♗b1 ♖h5 9.♖f4! and White is winning.

Problem #82

Keres–Fischer, Curacao, 1962

CORRECT ANSWER: C. “White can draw.”

CLASSIFICATION: STRATEGY – ENDGAME

PARADOX: Queen works very well and originally.

White has a good defense: **1. ♖e5!** Actually, White has several good drawing defenses. Simplest is probably 1. ♗g4 ♜h1+ (1...g1=♜ 2. ♗f5+! ♜xf5 3. ♜g7+! ♜xg7 1/2-1/2.) 2. ♗h3 g1=♜ 3. ♜g6+!, but not 1. ♗h3?? ♜f6+ 2. ♜h5 ♜h6+ 3. ♜g4 ♜g6+ and 4...♜xg3+. **1... ♜h1+** If 1...g1=♜, then 2. ♗f5+ ♜g8 3. ♜e8+ with perpetual check. **2. ♗h3 ♜xh3+ 3. ♜xh3 g1=♜ 4. ♜e7+ ♜h8 5. ♜f8+ ♜h7 6. ♜f7+ 1/2-1/2.**

However, we should also check 1...♜f2+ 2. ♜h3 g1=♜ (2...g1=♜+ *does not help.*) 3. ♗f5+ ♜h6 4. ♜f6+ ♜h5 5. ♗g6+ ♜xg6 6. ♜g5+!! ♜xg5 stalemate!

Problem #83

Botvinnik–Sorokin, Moscow, 1931

CORRECT ANSWER: A. “White is better.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: “Antipositional” set-up of White’s pawns.

Mikhail Botvinnik “weakens” his position profitably. **1. ♜e3! ♜xe3 2. fxe3 ♗g4 3. a5 ♖c8** Or 3...♖bd7 4. h3 ♗xf3 5. gxf3 ♖c5 6. b4 ♖e6 7. ♗xe6 fxe6 8. ♖a4! and 9. ♖c5 with advantage to White. **4. ♖c1 ♗xf3 5. gxf3 ♖e7 6. ♖d5! ♖c6** If 6...♖fxd5 either 7. exd5 or 7. ♗xd5 ♖xd5 8. ♖xd5, is to White’s advantage. **7. ♖xf6+ gxf6 8. ♖d7 ♖ab8 9. ♜f2! ♖xa5 10. ♖cc7 ♖bc8 11. ♖xf7 ♖xc7 12. ♖xc7+ ♜h8 13. ♗d5!** and White realized his advantage. We can create weaknesses in our own camp, providing we create greater ones in the enemy’s.

Problem #84

Forgacs–Tartakower, St. Petersburg, 1909

CORRECT ANSWER: B. “White stands very actively – he wins.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Safety of white king unimportant.

White starts a strong attack, opening the f-file. **1. f5! exf5 2. g4!!** Do not worry about White’s king – it is Black’s that is in danger. **2... f×g4** Black should not allow 3. gxf5. **3. ♖g5 g6** If 3...h6 4. ♖h7 ♖fc8 5. ♖f6+! with a strong attack. **4. ♖f6 ♜g7** If 4...♖d8, White has the plan of ♖e1-f1 and ♜d2-f2-h4. **5. ♖ef1 ♗e8 6. ♜f4 ♖d8 7. e6!** White controls two important points – e5 and f7. **7... ♖a6 8. ♜e5! ♜h6 9. ♖1f5 f×e6 10. ♖f7+ ♜xf7 11. ♖h5+ ♜g7 12. ♖xg6# 1-0.**

Problem #85

V. and M. Platov, 1909

CORRECT ANSWER: A. "White wins."

CLASSIFICATION: TACTICS – ENDGAME

PARADOX: Two minor pieces better than queen in ending.

White can catch the a-pawn, if he wishes: 1. ♖f6 d4 2. ♗f3 a1=♙ 3. ♖×d4+ ♙×d4 4. ♖×d4 ♗×d4 5. ♗g4 ♗×d3 6. ♗g5 ♗e4 7. ♗h6 ♗f5 8. ♗×h7 ♗f6 with a draw. But only a draw, having so big an advantage in material? No! **1. ♖f6 d4 2. ♗e2! a1=♙** 2... ♗×e2 3. ♖×d4 and White wins very easily. **3. ♗c1!!** A time for fantasy. White threatens mate on g5, and 3... ♙×c1 4. ♖g5+ ♗×d3 5. ♖×c1 does not work for Black. **3... ♙a5** Black controls the g5-square; if 3... h6 4. ♖e5! and 5. ♖f4. **4. ♖×d4+! ♗×d4 5. ♗b3+** and 6. ♖×a5 winning. The most difficult move to find was 3. ♗c1!!.

Problem #86

V. and M. Platov, 1907

CORRECT ANSWER: B. "White can draw."

CLASSIFICATION: TACTICS – ENDGAME

PARADOX: Stalemate yourself!

White has to decide whether to play for a win or a draw. Obviously, for a draw, otherwise the h-pawn is too strong. **1. h7+ ♗h8 2. ♖g7+! ♗×h7 3. ♖a1+!!** What on earth is going on? **3... ♗g6 4. ♖×c6+ ♗h5** It seems Black is winning. **5. ♗b2!!** Threatening ♖c1. **5... h1=♙ 6. ♖h6+!! ♗×h6** stalemate! Black could try to fiddle around with 5... ♖e4!? 6. ♖c1 ♗g4, but the presence of opposite-color bishops still makes a draw inevitable.

Problem #87

Hübner–Kasparov, Hamburg, 1985

CORRECT ANSWER: C. "Black can hope to win in this position."

CLASSIFICATION: TACTICS – OPENING

PARADOX: Original play by knights.

Black starts a strong attack. **1... ♗e4!!** The famous sore spot on f2. Now White loses after 2. ♙×e4 ♙a5+; and if 2. ♗gh3, then 2... ♙a5+ 3. ♗d1 ♗e×f2+! 4. ♗×f2 c5!; or 2. ♗d3 d5!. The black pieces cooperate very well. **2. ♖h3 ♙a5+ 3. ♗f1 ♗g×f2 4. ♖×e6 f×e6 5. ♗×e6 ♗d7!**

6. ♖h3 ♗xh3 7. ♗xe4 ♖e8 8. ♗c5+ ♗xc5 9. ♗g4+ ♖c7 10. ♗xh3
 Black concludes the game very expertly. 10... ♗e7! 11. ♗xg7 ♖hf8+
 12. ♗xf8 ♖xf8+ 13. ♖e1 ♗f2+ 14. ♖d1 ♗d4+ 15. ♖c2 ♗e4+
 16. ♖d2 ♗g5+ 17. ♖c3 ♗e5+ 0-1.

Problem #88

Taimanov–Larsen, Vinkovci, 1970

CORRECT ANSWER: B. “Black has an interesting idea – with an unclear game resulting.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Unusual march of g7-pawn.

Black has castled short, but does not worry about his king. 1...g5!? 1...♖d8 2.0-0 or 2.♗b5 would be too passive. 2. ♗g3 2...♗xg5? ♗xg5 3. ♗xg5 d4. 2...g4 3. ♗d4 3. ♗e5 ♗f6 4. ♗xc6 bxc6 5.0-0 ♗e6 and Black threatens 6...d4 or, after 6.♗c2, 6...c5. Later analysts have found 3. ♗d2! d4 4. ♗c4 ♗f5 5. ♗e2 dxe3 6.0-0! with an attack. 3... ♗xd4 4. exd4 ♗g5 5.0-0 Belov gives 5. ♖c2!? ♖e8+ 6. ♖e2 ♖xe2+ 7. ♖xe2 ♗e6 8. ♖d1 with equality. The rest of the game is very instructive. 5... ♗xc1 6. ♖xc1 ♗e6 7. h3 g×h3 8. ♗e5 f6 9. ♗e4 f×e5 10. ♗g3+ ♗g4!! Fantasy! 11. ♗xg4+ ♖h8 12. ♗g5 ♗d2 13. ♖c7 ♗xf2+ 14. ♖h2 ♗xg2+ 15. ♗xg2 h×g2 and Black soon won.

Problem #89

Benko–Psakhis, Aruba, 1992

CORRECT ANSWER: B. “Black does his best to counter-attack, to his advantage.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Sudden break in center.

The test position was reached as follows. 1. c4 e5 2. ♗c3 d6 3. d4 exd4 4. ♗xd4 ♗c6 5. ♗d2 ♗f6 6. g3 ♗e6 7. e4 ♗e7 8. b3?. Now, from the diagram, not automatic castling, but 8... ♗xe4! 9. ♗xe4 What is there for Black’s sacrifice? 9...d5! 10. cxd5 Alternatively:

a) 10. ♗c3 d4 threatening ... ♗b4;

b) 10. ♗g2 ♗b4 11. ♗c3 d4 12. ♗b2, which was seen in Franco–Romero Holmes, Leon, 1990, when Black went on to win after 12... ♗f6 13. ♗ge2 0-0

10... ♗b4 11. ♗c3 ♗xd5 12. f3 ♗f6! 13. ♗b2 0-0-0 and Black soon won.

Problem #90

Cheron, 1965

CORRECT ANSWER: B. "The game should end in a draw."

CLASSIFICATION: TACTICS – ENDGAME

PARADOX: Knight and two pawns no worse than two rooks.

The introduction is easy to find. **1.c7 ♖c6 2.e7 ♗he6** What now? Maybe bring the last piece into action: **3.Nd6!** Black must take the knight sooner or later. **3...♖cxd6+ 4.♕c4 ♖c6+ 5.♕d5!** White has a draw:

- a) 5...♖xc7 6.♗xe6 ♖c8 7.♗d7 ♖a8 8.e8=♖+ ♖xe8 9.♗xe8 ♕xh7;
- b) 5...♖xe7 6.♗xc6 ♖e8 7.♗d7;
- c) 5...♖ed6+ 6.♗e5 ♖e6+ 7.♗d5!!

Also, 3...♕xh7 leads to the same result, 4.♗d4!! ♖cd6+ 5.♗c5 ♖c6+ 6.♗d5 ♗g7 7.e8=♖! ♖cd6+ 8.♗c5 ♖xe8 9.♗xd6, with 10.♗d7 and 11.c8=♖ to follow.

Problem #91

Kr. Georgiev–Pelitov, Pazardzhik, 1974

CORRECT ANSWER: A. "White does not allow the enemy king to escape, and wins."

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Quiet move ends sharp game.

A "quiet" move decides. **1.♖f7!!** No retreat for the black king. **1.♗gf6** 1...♗d6 2.♗f4+ ♗c5 3.♗e3+ ♗b5 (3...♗d6 4.♖d1+ ♗c7 5.♖f4+ ♗e5 6.♖xd8.) 4.♖b3+ ♗a5 5.♗d2+ ♗a6 6.♖a4+ ♗b6 7.♖a5#; 1...♖f6 2.f4+ ♗xe4 3.♖e1+ ♗f5 4.♖h5+ g5 5.g4#. **2.♖d1** Now White threatens 3.f4+ ♗xe4 4.♖g6#. **2...♗c5 3.♗d2 ♗xf2+ 4.♗xf2 ♗xe4+ 4...♖b6+ 5.♗e2 ♖a6+ 6.♗c4+ ♗xe4 7.♖g6#. 5.♗xe4 ♖f8 6.♗f4+! ♗xe4 7.♖e1+ ♗d4 8.♗e3+ ♗e5 9.♗c5# 1-0.**

Problem #92

Krason–Szypulski, Warsaw, 1984

CORRECT ANSWER: A. "White wins."

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Series of fine sacrifices.

1.♗c6+!! Two exclamation marks for fantasy. **1...bxc6 2.♗f4+ ♗b7 3.♗xc6+! ♗xc6 4.♗d5+ (4.♗a4+!) 4...♗xd5** Black's king must wander. If 4...♗b7 5.♖c7+ is routine, but lethal: 5...♗a6 6.b4 ♗xd5 (6...♖e6 7.b5+ ♗xb5 8.♖b1+ ♗a6 9.♖c4+ ♗a5 10.♖b5#.) 7.b5+! ♗xb5 8.a4+

♖a6 9.♖c4+ ♜b7 10.♖xd5+ ♜c8 11.♖c6#. **5.♖ac1 ♜c5** That was Black's defense against three mates: 6.♖c4#; 6.♖c6+ ♜xd4 7.♖fd1#; and 6.♖b3+ ♜xd4 7.♖fd1#. **6.♖c4+ ♜c6 7.♖a6+ ♜d7 8.♖b5+ ♜e6 9.♖xc5 ♜e8** After 9...♜d5 Black's position is also hopeless: 10.♖c6+ ♖d6! (10...♜d7?? 11.♖b6+ ♜c8 12.♖b8#.) 11.♜xd6 ♖xd6 12.♖fc1! ♜e7 13.♖1c5 ♜b6 14.♖xf5 gxf5 (14...♖xc6 15.♖xc6+ ♜xf5 16.♖b5+ ♜g4 17.♖e5) 15.♖e5+. **10.♖e5+ ♜f6 11.♖xe7 ♜xe7 12.♖e5+ ♜d7 13.♖xh8 ♜g7 14.♖xh7 ♜xd4+ 15.♜h1 ♜e6 16.♖h4 ♜f6 17.h3 ♖e8 18.g4 ♜xg4 19.hxg4 ♜d5 20.♖g3 ♖h8+ 21.♖g2 f5 22.♖b3 ♖h4 23.gxf5+ gxf5 24.♜g3 ♖g4 25.♖xf5 1-0.**

Problem #93

Lipnitsky–NN, Kiev, 1956

CORRECT ANSWER: B. "White has the upper hand."

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Unexpected attack by white pawn.

White has troubles with his c3 and c4-pawns. Black threatens ...♜c8-a6, ...♖a4, ...♜b8-c6-a5. Yet White has a powerful idea, and in fact stands better: **1.g4!!** Some examples:

- 1...♜a6 2.gxf5 exf5 3.♖e3+ with the advantage, or 2...♜xc4 3.♜g2 ♜c6 4.fxe6;
- 1...♜b7 2.d5 0-0 3.gxf5 exf5 4.♖g1, or 3...exd5 4.cxd5 ♖xf5 5.♖g1 (*intending ♜g2-e4*) 5...♖xd5 8.♖h6 g6 7.♜g2;
- 1...fxg4 2.♖g1 or 2.♜g2 with initiative;
- 1...cx-d4 2.cxd4 ♖xd2+ 3.♜xd2 fxg4 4.♖g1 h5 5.h3! gxh3 6.♜xh3 with initiative and advantage.

So, instead of troubles – an attack. But only after the fearless 1.g4!!.

Problem #94

Chandler–Vaganian, London, 1986

CORRECT ANSWER: A. "White wins."

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Selfless queen.

1.♖g2!! Black's rook, bishop and pawn cooperate very well, but White's queen is fantastic! Black has no choice in what to reply. **1...♖xh2+ 2.♖xh2 gxh2 3.♜h6+ ♜e7 4.♜g5+ ♜f8 5.♜h6+ ♜e7** After these repetitive moves, White gets on with it. **6.♜g6! ♜c7** (6...♖f8 7.♜g5#) **7.♜g5+ ♜f8 8.♜h6+ ♜e7 9.f8=♖+ ♖xf8 10.♜xf8+ (10.♜g5+!) 10...♜d8 11.♖f7 ♖e8 12.♜g7 ♜xe5 13.♜f6+ 1-0.**

Problem #95

Norwood–King, London, 1988

CORRECT ANSWER: A. “White gains the initiative, and the better prospects.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: “Suicidal” move.

1.e4!! Black can capture in two ways, and with a fork. **1...♙xf3** If Black accepts the offer, he will be without a pawn. **1...fxe4** **2.♗xe4 dxe4** **3.♖xe4+ ♗e6** **4.♗g5! ♗f8** **5.♗h3** and a capture on e6. **2.e5!** More space! **2...♖e6** **3.♗xf3 ♗e7** **4.b4** White has achieved a great advantage that he turned into a win easily enough. **4...h5** **5.h4 g6** **6.b5 ♗h6** **7.bxc6 bxc6** **8.♗g5 ♗b6** **9.♖a6 ♖d7** **10.♗ac1 ♗c4** **11.♗b1 ♗b6** **12.♗xb6 ♗xb6** **13.e6 ♖c7** **14.♗f4 ♖d8** **15.♖xa7 ♗g4** **16.♗c7 1-0.**

Problem #96

A. and K. Sarychev, 1928 (conclusion of a study)

CORRECT ANSWER: B. “White has full equality.”

CLASSIFICATION: STRATEGY – ENDGAME

PARADOX: “Illogical” march of white king.

Chess is logical; yet sometimes it seems completely illogical. White cannot win after **1.♖e6** because of **1...♖e4!** **2.c8=♖ ♗f5+**. Also **1.c8=♖ ♗f5+** **2.♖c7 ♗xc8** **3.♖xc8 b5** is bad. But **1.♖c8!!** He blocks his own pawn, and allows the b7-pawn to run. **1...b5** It escapes. **2.♖d7!!** Another curiosity. What can White get for such a loss of time? **2...b4** And it keeps running. **3.♖d6!** At last, the first queening threat, **4.c8=♖**. **3...♗f5** The only move. **4.♖e5!** A second threat, **5.♖xf5** and **6.c8=♖**. **4...♗c8** **5.♖d4** What has happened? The king has caught the running pawn, and with a gain of tempi. Logical!

Problem #97

Zinar, 1982

CORRECT ANSWER: C. “The position is level.”

CLASSIFICATION: STRATEGY – ENDGAME

PARADOX: Strange ways of the white king.

The position is ultimately even, but there are so many paradoxes along the way. **1.♖g7!!** If **1.♖f6?** **♖xc6** **2.♖g5 ♗b6** **3.♖h6 ♖a5** **4.♖xh7 ♗b4** **5.♖g6 ♖xc4** **6.♖f5 ♖c3** **7.♖e5 c4** **8.a4 ♗b4**. **1...h5** **2.♖f6!** After the pawn. **2...h4** **3.♖e5!** **♖xc6** Ruling out promotion. **3...h3** **4.♖d6** leads to a drawn queen ending. **4.♖f4 ♗b6** **5.♖g4 ♖a5** **6.♖xh4 ♗b4**

7.♔g3!! Not 7.♔g4? ♖×c4 8.♖f3 ♖d3! 9.a4 c4 10.a5 c3 11.a6 c2 12.a7 c1=♖ 13.a8=♖ ♖h1+. 7...♕×c4 8.♕f2! ♕c3 9.♕e2! 9.♕e1?? and Black promotes on c1 with check. 9...c4 10.a4 A draw.

Problem #98

Tal–Hjartarson, Reykjavik, 1987

CORRECT ANSWER: A. “White puts the black position under heavy pressure.”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Unconventional means of fighting for initiative.

White pressures in an unconventional way. 1.♖c5! Targeting the weakness on b5. 1...♗a6 1...d×c5 2.♗f×e5! and White wins after 2...♔g8 3.♗e7+. Other moves: 1...♗c7 2.♗c×e5, or 1...♗×c6 2.♖×c6 with clearly the better game for White. 2.♖×b5 ♗c7 2...♗×c6 3.d×c6 ♗c7 4.♖a5! ♖×c6 5.♗×e5! d×e5 6.♖×e5+ ♗f6 7.♖c5 winning. 3.♖b8! ♖×d3 4.♗c×e5! ♖d1+ 4...d×e5 5.♖×e5+ ♗f6 6.♖e7+ ♔h6 7.♖f8+ ♔h5 8.♖×f6, or 5...♔h6 6.♖g5+ ♔g7 7.♖e7+ ♔h6 8.♖f8+ ♗g7 9.♖×f4+ winning in all cases. 5.♕h2 ♖a1 6.♗g4+! ♕f7 7.♗h6+ ♕e7 8.♗g8+ and Black resigned in view of 8...♕f7 9.♗g5*.

Problem #99

Kaminer, 1925

CORRECT ANSWER: A. “The two white pieces do not allow the enemy king to escape from the mating net.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Bishop no worse than queen in ending.

A horror story for the black king. 1.♖c2!! A rook en prise. 1...♖×c2 What can White do with only a bishop? 2.♗d8+ g5 The idea – play against Black’s king. 3.♗a5 Threatens 4.♗e1+ ♖f2 5.♗×f2 ♖ – 1st checkmate. 3...♖e2 4.♗c7! 5.♗g3 ♖ – 2nd checkmate. 4...♖f2 5.♗d6!! This time without threats, but Black is in Zugzwang: 5...g4 6.♗e7+ ♖f6 7.♗×f6 ♖ – 3rd mate; 5...♖e1 6.g3+ ♖×g3+ 7.♗×g3 ♖ – 4th mate; 5...♖e2 6.♗g3 ♖ – 5th mate. 5...♖f4+ 6.g3+! ♖×g3+ 7.♗×g3 ♖ – the 6th mate and the final one. David versus Goliath – and so many checkmates.

Problem #100

Jakimchik, 1966 (conclusion of a study)

CORRECT ANSWER: A. “White wins!”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Surprising sacs – then underpromotion.

White's e-pawn is too far advanced to be caught, therefore Black seeks counterplay. **1...g3! 2.♠f7** Do not hurry. 2.e7 ♖h5! 3.♙c4 ♗e8! and the e-pawn would be useless. **2...♗e3!** (2...♙b3 3.♙g6+ and 4.e7) **3.♙e8!!** 3.e7? ♗f2! 4.e8=♗ (4.♙d5 ♗a4) 4...♙f3!! 5.♙d5 ♙xg2+ 6.♙xg2 stalemate! **3...♗f2 3...♙f3 4.♗g1!** and 5.e7. **4.♙c6** White takes control over the important long diagonal. Yet Black is still kicking. **4...♙e2! 5.e7 ♙f1** Now 6.e8=♗ ♙xg2+ 7.♙xg2. **6.e8=♗!!** The end of fantasy. ♗e8-f6-e4 and the g3 pawn is lost. White wins.

Problem #101

Polugaevsky–Nezhmetdinov, Sochi, 1958

CORRECT ANSWER: C. “Black has an attack, and wins!”

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Unusual rook sacrifice.

Black's attack is intuitive. **1...♖x4!! 2.♖xh2 2.♗x4 ♗xc2+** 3.♗xc2 ♗xc2 is winning for Black, as is 2.gxf4 ♙xf4+! 3.♗x4 ♗xc2+. **2...♖f3+ 3.♗d4 ♙g7!!** Without a queen, but with pleasant threats. **4.a4** What else? Here is Rashid Nezhmetdinov's analysis:

a) 4.♗g1 ♖xg3! 5.♗e2 ♖f3 6.♗g1 ♗ed3+ 7.♗c4 ♗xb2+ 8.♗xb4 ♙c3+ 9.♗a3 b5! 10.♗d4!? ♙xd4 11.♗xf3 ♙c3! 12.b4 ♗c4+ 13.♗b3 ♙xa1 14.♗g5 g3! and Black wins;

b) 4.♖f2! ♖xf2 5.♗e3 ♖f3+ 6.♗d2 ♙h6+ 7.♗f4 ♖xg3 with an attack.

4...c5+ 5.dxc6 bxc6 6.♙d3 ♗exd3+ 7.♗c4 7.e5 ♙xe5+ 8.♗e4 d5#. 7...d5+! 8.exd5 cxd5+ 9.♗b5 ♖b8+ 10.♗a5 ♗c6+ 0-1. “I think it was my greatest game,” confessed Nezhmetdinov. And we agree with him.

Problem #102

K. Hartmann–Recker, Germany, 1989

CORRECT ANSWER: C. “Only White can claim any advantage.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Obvious tactic unclear.

1.e4 ♗f6 2.♗c3 d5 3.exd5 ♗xd5 4.d4 ♗xc3 5.bxc3 ♗c6 6.d5 ♗e5 7.♗f3 ♙g4 was how this particular game reached the position of the diagram, though a transposition from the Scandinavian Defense was also possible. **8.♗xe5!** Best, but not immediately decisive. **8.♙e2** is about level. **8...♙xd1 9.♙b5+ c6 10.dxc6 a6** Black is right not to choose **10...♗d5?** 11.cxb7+ ♗d8 12.♗c6+! **1-0** Fedorov–Chernin, Minsk, 1980. If **10...♙e2** then 11.♗d3, not 11.♗xe2?? ♗d5 12.c4 ♗xe5+ 13.♙e3 0-0-0 14.cxb7+ ♗b8 15.♗f3 ♗f5+ 0-0 Goldenberg–Chevaldonnet, Bordeaux, 1982. **11.c7+** 11.cxb7+! axb5 12.♗c6 is what White should play for a plus. **11...axb5 12.cxd8=♗+ ♖xd8 13.♙e3 ♙xc2 14.♖c1 ♙f5** Now White, already worse, falls apart. **15.♗e2? f6 16.♗f3 ♙d3+ 17.♗d2 e5 18.♖hd1 ♙a3 0-1.**

Problem #103

Estrin–Nun, corr., 1965/66

CORRECT ANSWER: C. “Black, a rook down, is able to win!”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Surprising moves to unusual squares.

Black plays unconventional moves. **1...♖h2!!** Where better to control the e5-square than from h2? **2.♗f2 ♘g3 3.♙e1 ♚fe4+!** In the direction of the white king. **4.♗f3 4.♜e3 ♚xh1 5.♙xh1 exd4+** and Black wins. **4...♚d2+!!** Weaker would be **4...♙f6+ 5.♜e3 ♙f4+ 6.♜d3. 5.♚xd2 (5.♙xd2 ♙g6+ 6.♙f4 exf4 7.♙xh2 0-0-0-+)** **5...♙f6+ 0-1.** If **6.♜e3 ♙f4+ 7.♜d3 ♖f5+.**

Problem #104

Polugaevsky–Korchnoi, Buenos Aires, 1980 (variation from the game)

CORRECT ANSWER: C. “Black wins.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Fine pawn sacrifice in ending.

Black has one extra pawn, and it decides the ending. But only as a desperado.

a) **1.♜e6 b2 2.♙b1 ♙d2 3.d7 ♜c7!** Black wins easily;

b) **1.♙b1! ♙d2!! 2.♙xb3 ♜c5 3.♙b1 ♙d5+! 4.♜e4 ♙xd6** winning.

1...♙d2!! is a fine introduction to the winning maneuver.

Problem #105

Bogoljubow–Alekhine, Hastings, 1922

CORRECT ANSWER: B. “Black wins.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Impressive career of black pawn.

Black’s main trump is the b-pawn. **1...b4! 2.♙xa8 bxc3! 3.♙xe8 c2!!** The brave pawn goes further. **4.♙xf8+ ♗h7 5.♚f2 c1=♙+** Now the second part, the realization of the advantage. **6.♚f1 ♚e1! 7.♙h2 ♙xc4 8.♙b8 ♖b5 9.♙xb5 ♙xb5** and Black went on to win. Black could also have won by **2...♙xa8 3.♙b3 ♙a1**, but style, style!

Problem #106

Kasparov–T. Petrosian, Tilburg, 1981

CORRECT ANSWER: B. “This sharp position should end in a draw.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Brave leap by black king in front of enemy forces.

Black’s king has troubles, but he can take care of himself: **1...♗c6!! 2.♙ba3? bxc4 3.♙xa6+ ♙xa6 4.♙xa6+ ♖b6 5.♖c5 ♙d8 6.♙a1 ♚xc5 7.dxc5 ♗xc5 8.♙a4 0-1.**

However, the correct result was a draw, as Kasparov points out: 2. ♖xc7 bxc4 3. ♗b7 ♖xc7 4. ♗xa6+ ♖xa6 5. ♗b5+ ♖d6 6. ♗xa6+ ♖e7 (6... ♗c6 7. ♗a3+ and White wins.) 7. ♖xd5 ♖xb7 8. ♖xb7 (8. ♗xe6+? ♖d8 9. ♗xe8+ ♖xe8 10. ♖xb7 c3 and Black wins.) 8... ♗b8 9. ♖f2 with equality.

Problem #107

Gurgidze and Mitrofanov, 1982

CORRECT ANSWER: B. “Suddenly White is winning!”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Strange path of king, and strange dance of rook.

White plays some terribly strong moves. **1. ♖b1!!** The queen cannot retreat in view of ♖xg1#. More on why 1. ♖b1 in a moment. **1...c4 2. ♖c6!! h4 3. ♖b7! h3 4. ♖a8!! c3 5. bxc3 ♗b8+** and White has the winning **6. ♖xb8! h2 7. ♖h8!** Here was the reason for 1. ♖b1; it was the first step of a square dance ♖f1-b1-h8-h2.

Problem #108

Mattison, 1930

CORRECT ANSWER: A. “White wins.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: Two bishops ensnare rook.

You think a draw is not far away since both bishops are under attack? Do not bother going into a ♖+♖ v ♗ ending – 1. ♖xd3 ♖xe6 2. ♖f4, or 1... ♖xh6 2. ♖g4. You have something special.

1. ♖d5! ♖xd5 2. ♖e3!! A fantastic blow! White threatens checkmate on f7. Also the rook is in danger. The variations are favorable for White.

a) 2... ♖g5 (2... ♗d6.) 3. ♖f7+ ♖g6 4. ♖h2! d2 5. ♖xd2 ♖g4 6. ♖xg6;

b) 2... ♖g5 3. ♖f7+ ♖h6 4. ♖e8!! Malicious bishops.

We should also be aware that 2. ♖d2?? misses the win: 2... ♖f5!! 3. ♖xf5 stalemate. Another wrong way is 2. ♖f4?? ♖g5 3. ♖f7+ ♖g6 4. ♖h2 ♖g4!, which is a draw, as is 4. ♖e8 d2 5. ♖a4.

Problem #109

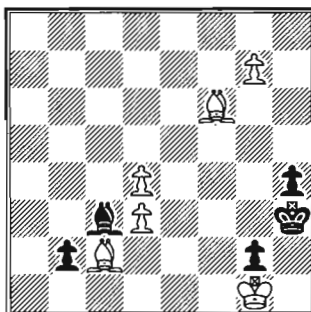
Jaenisch, 1859

CORRECT ANSWER: C. “White wins.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: White promotes to bishop instead of queen

White wins after some hard fighting. **1...g2+** Black's main positional assets are his advanced pawns. **2.♖g1 ♕a5** Threatening ...♕xc3-d2-e3#. White must not delay. **3.g7 ♕xc3**



4.g8=♕!! This is not a misprint! Compare **4.g8=♖ b1=♖+!** **5.♕xb1 ♕xd4+!** **6.♕xd4** stalemate; or **4.g8=♗ ♕d2** **5.♖f2 ♕e3+!** **6.♖xe3 g1=♖+** and Black wins. **4...♕d2** **5.♕e6+** **♖g3** **6.♕e5+** **♖f3** **7.♕d5+** **♖e3** **8.♖xg2 ♕c3** **9.♕a2 ♖d2** **10.♕cb1 ♖c1** **11.♕f4+** White wins here, and also after **10...♖e3** **11.♖h3 ♕e1** **12.d5**.

Problem #110

I. Nowak, 1991

CORRECT ANSWER: C. "Black stays calm, and wins!"

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Brave march of black king.

Black can defend his king. The natural continuation is **1.♕xf4+** **1.♖xf4+** **♖e7** and **2...♖e8**, or **1.dxc5+** **♖xc5** and **2...♖b6** and Black is winning. **1...♖d5!!** Worse would be **1...e5?** **2.dxc5+** **♖xc5** **3.♖xc4+** where White wins, or **1...♗e5** **2.♕xe5+** **♖c6** **3.♕xc4 ♗a6** **4.0-0** and **5.♖c1** with White on the attack. White could also decide on **4.♖f3+** **♖b6** **5.♖b3+**. **2.♖h5+** **e5** **3.♖f3+** **e4** **4.♖h5+** **g5!** **5.♕xg5 ♖d7!** and the black king is saved.

Problem #111

D. Paunovic–Yilmaz, Istanbul, 1988

CORRECT ANSWER: A. "White wins."

CLASSIFICATION: TACTICS – OPENING

PARADOX: Fine queen play.

1.♖e5!! Difficult to find? The queen worked well along the a1-h8 diagonal, yet the bishop and the b2-point are still under attack. But everything is all right. The black forces are divided, hence weaker. **1...♖b7**

Other moves also have bad outcomes. 1...dxe5 2.♙f7#; 1...♗xc4 2.♖xf8+! ♖xf8 3.♗xe7#; 1...e6 2.♙xe6 dxe5 3.♖d8#. **2.♙d5!** New threats: 2...♖c7 3.♙c6+! ♖xc6 4.♖xf8+ ♗xf8 5.♗xe7+ ♗g8 6.♗e8#; 2...dxe5 3.♙f7#. **2...♗b6 3.b3 ♙g4** Also possible was the finale 3...♖a7 4.♗e4 ♖c7 5.♙f7+ ♗d7 6.♗e6+ ♗c6 7.♖xd6+! exd6 8.♗e4+ and mate shortly. **4.♗e4! ♙c8** If 4...♙xd1 5.♙xb7 and Black is helpless against 6.♖xd1 and 6.♖xf8+. **5.♙c6+ ♗d8 6.♖xf8+ ♖xf8 7.♖xd6+ ♗c7 8.♗xe7+ ♗b8 9.♗xf8 1-0.**

Problem #112

Ribli–Kouatly, Lucerne, 1985

CORRECT ANSWER: A. “White’s attack is decisive.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Unusual attack with bishop via g2-h3-e6-f7!

White finds a fantastic strategic maneuver for his bishop. **1.♙h3!!** A way to f7 via h3 and e6! Now the main threat is 2.♗h7+ ♗f8 3.♗e6+ fxe6 4.♙xe6 and 5.♗g8#. **1...♗f8** If 1...♗e5 2.♗h7+ ♗f8 3.♗e6+ fxe6 4.♙xe6 ♗f7 5.♙b2! winning. **2.♗e6+! ♗g8** 2...fxe6 3.♙xe6 has already been mentioned. White now repeats some moves but quickly gets back to business. **3.♗g5 ♗f8 4.♗e6+ ♗g8 5.♗xd8 ♖cxd8 6.♙g2 ♙f6 7.♗h6 e6 8.h4 d5 9.h5 ♙g7 10.♗g5 dxc4 11.♖xd8 ♖xd8 12.bxc4 gxh5 13.♙b2 e5 14.♙d5 ♖d6 15.♗xh5 ♖d7 16.♗f5 1-0.**

Problem #113

Korolkov, 1951

CORRECT ANSWER: A. “White wins.”

CLASSIFICATION: TACTICS – ENDING

PARADOX: ♗+♙ beats ♖+♙ in ending.

White’s main positional asset is his strong f6-pawn, hence the introduction is easy to find. **1.f7! ♖a6+!** If 1...♖f6 2.♙b2 winning, or 1...♖g8 2.fxg8=♗+ ♗xg8 3.♗e7+. **2.♙a3!!** 2.♗b2? ♖f6; 2.♗b1?? ♙xf5+ is even worse. **2...♖xa3+ 3.♗b2 ♖a2+** Intending if 4.♗xa2?? ♙e6+ and 5...♙xf7. **4.♗c1!** 4.♗c3? ♖c2+! with a draw. **4...♖a1+ 4...♖c2+? 5.♗d1. 5.♗d2 ♖a2+ 6.♗e3 ♖a3+ 7.♗f4 ♖a4+ 8.♗g5 ♖g4+!** Stubborn defense. 9.♗xg4?? ♙xf5+ 10.♗xf5 ♗g7 11.♗e6 ♗f8 12.♗f6 would be stalemate. **9.♗h6! ♖g8** What a wonderful dance of king and rook! **10.♗e7! ♙e6 11.fxg8=♗+ ♙xg8 12.♗g6#.**

Problem #114

Reshevsky–T. Petrosian, Zurich, 1953

CORRECT ANSWER: A. “In a difficult position, Black finds an interesting way to equalize.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Positional sacrifice of exchange.

Black’s position seems uncertain, but he finds an interesting resource.

1...♖e6!! The knight on d5 will be more than a match for any rook! 2.a4 ♖e7! 3.♙×e6 f×e6 4.♗f1 ♖d5 Black has full equality. 5.♖f3 ♙d3 6.♖×d3 c×d3 7.♗×d3 b4 8.c×b4 a×b4 9.a5 ♖a8 10.♖a1 ♗c6 11.♙c1 ♗c7 12.a6 ♗b6 13.♙d2 b3 14.♗c4 h6 15.h3 b2 16.♖b1 ♗h8 17.♙e1 ½-½.

Problem #115

Smagin–Sahovic, Biel, 1990

CORRECT ANSWER: C. “The ‘difficulties’ along d1-h5 diagonal are only an illusion – White wins.”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Fine queen sacrifice.

The theme is old, but the form is new. 1.♖×g5!! ♙×d1 2.♖×e6 ♗b8 If 2...♗d7 3.♖×g7+ and 4.♙f5, but not 3.♙f5 ♙h4!. 3.♖×g7+ ♗d8 Or 3...♗f7 4.♙h6!? ♙f8 5.0-0+ ♗g8 6.♖7f5! ♙g4 7.♖f4! ♙×f5 8.♙×f5 ♖d8 (8...♙×h6 9.♙e6+ ♗g7 10.♖h5+ ♗g6 11.♙f7+ ♗g5 12.h4#.) 9.♙e4!! ♙×h6 10.♙×d5+ ♗g7 11.♖h5+ ♗g6 12.♖f6+ ♗×h5 13.♙f3+ ♗g5 14.g3 threatening 15.h4#. Great creativity from Sergey Smagin! 4.♗×d1 b5 5.♖e6+ ♗c8 6.♖f5 ♙f8 7.♖f1! ♗b7 8.♙h6! ♙×h6 Smagin offers another fine idea: 8...♗b6 9.♖e3!! ♙×h6 10.♖×d5+ ♗a5 (10...♗b7 11.♖c5+ ♗c8 12.♖f7+-) 11.b4+ ♗a4 12.a3! ♗b3 13.♖c5+ ♗b2 14.♖f2+! ♗×a1 15.♖b3#. 9.♖c5+ ♗c8 10.♖×h6 ♖e7 11.♙e2 ♖g6 12.♖f7! 1-0.

Problem #116

Reshevsky–R. Salgado, Long Beach, 1988

CORRECT ANSWER: A. “White can punish Black severely.”

CLASSIFICATION: STRATEGY – OPENING

PARADOX: Making progress backwards.

Here is how it all started: 1.d4 ♖f6 2.♖f3 g6 3.c4 ♙g7 4.♖c3 0-0 5.e4 d6 6.♙e2 c5 7.0-0 c×d4 From the King’s Indian the game trans-

poses into the Sicilian Defense. 8.♟×d4 ♞c6 9.♙e3 ♞d7 10.♚d2 a6 11.f3 ♜a5 A rook move is probably better. 12.♞b3 ♜b4? With this error we arrive at the test position.

Seeing Black's overdeveloped queen, White decides to undevelop his. 13.♚d1! The threat is 14.a3. The plausible 13.♚c2 is inferior, because after 13...♞a5!, the now dubious sequence 14.e5? ♞×b3 15.exf6 ♞×a1 would hit the queen, giving White no time for the move that he would like to play, which is 16.♞d5. Placing the queen on its starting square avoids that, and turns 14.e5 into a winner. 13...♞a5 14.e5! 1-0. If the f6-knight ducks or dives, then White plays 15.♞d5.

Problem #117

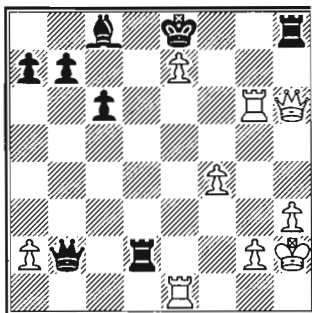
Maroczy–Romi, San Remo, 1930

CORRECT ANSWER: B. "Black is a piece up, and should win."

CLASSIFICATION: TACTICS – MIDDLE GAME

PARADOX: Nimble play by heavy pieces.

Having intractable problems to solve, White found the best move in the circumstances. 1.♙e1!! The queen cannot be taken because of 1...♙×h6 2.♙g8+ and 3.e8=♚+. 1...♙d2?? Black at least ought to play 1...♙×h3 2.♙e2! ♚d4. But better than that, and proof that he is winning, is 1...♙d3! threatening the murderous ...♙×h3+. What does White do after 1...♙d2??



2.♚h5!!! This may be "the move of the book." It is another example of "collinearity" – movement along a line of reciprocal attack (cf. Exercise #49 in an earlier chapter). 2...♙×g2+ 3.♙×g2+ ♙×h5 4.♙×b2 ♙×h3+ 5.♙g1 ♙h7 6.♙h2 ♙g7+ 7.♙f2 ♙g8 8.♙h6 ♙f7 9.e8=♚+ ♙×e8 10.♙h7+ 1-0.

Problem #118

C. Ward–Suba, England, 1990

CORRECT ANSWER: A. “Black wins!”

CLASSIFICATION: TACTICS – OPENING

PARADOX: Surprising bishop move.

Black develops his army in grand style. **1...♙h3!! 2.♙xh3 a×b4 3.♖b5 b×a3 4.♙c1 ♗e4 5.♙g4 d3 6.e×d3** If **6.♙×e3**, then **6...d×e2 7.♖fe1 ♖d3**, or **6...♗×g3! 6...♖×d3 7.c5 ♗f2!** With **8...♖e4** and **9...♖h1#** in mind. **8.♖×f2 e×f2+ 9.♖×f2 ♖e4 10.♖a2 ♖d5 11.♖d2 ♖×d2+ (11...♖×b3) 12.♙×d2 a2 13.♙f3 ♖×f3+! 14.♖×f3 a1 = ♖ 15.♖×b7 ♖h1+ 16.♖e3 ♖b8 0-1.**

Problem #119

Rusinek, 1971

CORRECT ANSWER: A. “White’s bishops are a menace – it will be a draw.”

CLASSIFICATION: STRATEGY – ENDING

PARADOX: Merry-go-round with pieces.

1.♙f3! ♗f2+ White draws after **1...♗df6+ 2.♙×f6 ♖×f6 3.♙×e4+**, or **1...♖e6 2.♖f5 2.♖g3 ♗h1+** The only move. **3.♖g2 ♖c6** The logical continuation. **4.♙a3!** Black’s king and knights are tied down; only the rook can move. **4...♖h8 5.♙b2!** If **5.♙b4? ♖b5; 5.♙e7 ♗d7 5...♖b8 6.♙a3 ♖b1** Or **6...♖b3 7.♙f8 7.♙f8!** The a3-f8 diagonal must remain under control. **7...♖a1 8.♙g7!** Another tempo. **8...♖a7 9.♙f8! ♖h7 10.♙a3 ♖h8 11.♙b2 ♖b8 12.♙a3 ♖b1 13.♙f8** Draw. A fantastic merry-go-round: **b2-a3-f8-g7-b2** and **h8-b8-b1-a1-a7-h7-h8**.

Problem #120

Najdorf–Kotov, Mar del Plata, 1957

CORRECT ANSWER: C. “White has a fine maneuver, which gives him victory.”

CLASSIFICATION: STRATEGY – MIDDLE GAME

PARADOX: Original bishop maneuver.

1.♙d1!! 1.♙×f6 ♙×f6 2.♖×h7+ ♖f8 was not attractive enough for White. **1...♖a5 2.♙h5!** An original route to f7! **2...♖ed8** If **2...♗×h5 3.♖×h5** winning. **3.♙×f7+ ♖f8 4.♙h6!** This is already execution by tactics. **4...♗e8 5.♖f4! ♙f6 6.♙×g7+! ♖e7 7.♙×e8 ♙×g7 8.♖×h7 1-0.** An original strategic beginning and a sharp tactical ending.

6. PROBLEM CLASSIFICATION AND SCORING

On the following pages are the scoresheets on which you can enter the points gained – according to your own assessment, which we trust will be as objective as possible. (We expect you will probably prefer to use photocopies of the original tables.)

Each problem was assigned to one of six categories depending on whether the solution:

- was of a more strategic or tactical nature;
- referred to the opening, or middle or endgame.

Let us recall that within the framework of each category it is possible to assign problems to a specified standard of play.

- Problems 1 to 5 are at an elementary level corresponding more or less to Elo 1600-1800 (125-150 BCF; Categories II to III).
- Problems 6 to 10 are at an intermediate level corresponding more or less to Elo 2000-2200 (175-200 BCF; Category I to Candidate Master).
- Problems 11 to 15 are at the Master level corresponding more or less to Elo 2300 (210+ BCF).
- Problems 16 to 20 are at a level corresponding more or less to the titles of IM and GM, and a standard of over Elo 2450 (230+ BCF).

The scoring, in keeping with the principles given in Section II:

- intuitive appraisal: 0, 1, or 2 points;
- analytic assessment: 0, 1, 2, 3, or 4 points;
- calculation of variations: 0, 1, 2, 3, or 4 points.

On the basis of rules accepted in this form – we make it clear again: highly conventional rules based on our subjective opinions and experience – you can attempt an analysis of your creative ability to solve problems in chess. Having already given further details on the subjects of scoring, interpretation of results, and the problems related to them, in earlier sections, we will not repeat them here.

I. OPENING STRATEGY

No.	Problem	Intuitive Appraisal	Analytic Assessment	Calculation of Variations	Time	Total
1.	1					
2.	2					
3.	13					
4.	19					
5.	27					
6.	35					
7.	39					
8.	43					
9.	49					
10.	57					
11.	62					
12.	66					
13.	76					
14.	77					
15.	83					
16.	91					
17.	93					
18.	102					
19.	110					
20.	116					
	Total:					

II. MIDDLE GAME STRATEGY

No.	Problem	Intuitive Appraisal	Analytic Assessment	Calculation of Variations	Time	Total
1.	11					
2.	12					
3.	14					
4.	22					
5.	26					
6.	33					
7.	36					
8.	47					
9.	58					
10.	60					
11.	69					
12.	74					
13.	79					
14.	84					
15.	88					
16.	105					
17.	106					
18.	112					
19.	114					
20.	120					
	Total:					

III. ENDGAME STRATEGY

No.	Problem	Intuitive Appraisal	Analytic Assessment	Calculation of Variations	Time	Total
1.	7					
2.	8					
3.	18					
4.	21					
5.	29					
6.	32					
7.	38					
8.	46					
9.	50					
10.	56					
11.	64					
12.	68					
13.	73					
14.	75					
15.	82					
16.	96					
17.	97					
18.	104					
19.	107					
20.	119					
	Total:					

IV. OPENING TACTICS

No.	Problem	Intuitive Appraisal	Analytic Assessment	Calculation of Variations	Time	Total
1.	3					
2.	10					
3.	15					
4.	20					
5.	28					
6.	37					
7.	41					
8.	48					
9.	52					
10.	53					
11.	65					
12.	70					
13.	80					
14.	87					
15.	89					
16.	95					
17.	103					
18.	111					
19.	115					
20.	118					
	Total:					

V. MIDDLE GAME TACTICS

No.	Problem	Intuitive Appraisal	Analytic Assessment	Calculation of Variations	Time	Total
1.	4					
2.	5					
3.	16					
4.	23					
5.	30					
6.	34					
7.	42					
8.	45					
9.	51					
10.	54					
11.	63					
12.	67					
13.	71					
14.	78					
15.	81					
16.	92					
17.	94					
18.	98					
19.	101					
20.	117					
	Total:					

VI. ENDGAME TACTICS

No.	Problem	Intuitive Appraisal	Analytic Assessment	Calculation of Variations	Time	Total
1.	6					
2.	9					
3.	17					
4.	24					
5.	25					
6.	31					
7.	40					
8.	44					
9.	55					
10.	59					
11.	61					
12.	72					
13.	85					
14.	86					
15.	90					
16.	99					
17.	100					
18.	108					
19.	109					
20.	113					
	Total:					

7. FAVORABLE CONDITIONS FOR CREATIVE SOLVING

You have just completed a rather difficult assignment, solving problems of varying complexity. That work, providing it was carried out by “honest toil and sweating brow,” will not be wasted. Solving such problems should broaden your horizon of chess thinking and help free it from restrictive rules or hackneyed examples. Presumably you will often recall the wisdom gathered here when facing new problems in tournament battles. And many a time there will flash through your mind an innovative idea whose execution will bring you full creative satisfaction.

If it sometimes seemed that breaking mental habits requires the intervention of an indefinable “divine inspiration” or creative muse, which may or may not appear at its capricious whim – then at the end of this chapter we shall rapidly overturn such notions. We ourselves can summon the gods to earth! After all, we saw how ingrained habits are overcome, and how to turn currently prevailing judgements and opinions to our own advantage. Each rule or principle, every formula and method for action, has its exception. Relativism is written into the nature of chess! And we cannot say that these “loop-holes” negate chess logic. In fact quite the opposite, they actually embody it. The positions presented on the chessboard before us, courtesy of genuine masters, are not the forms of commonly known ideas (which blind us with their fake glitter) but merely the echoes of the deeper hidden reality.

If at a critical moment we want to get to that deeper layer, we have to sharpen our intellectual tools, so that we can see – in each considered thesis, its antithesis – in each proposal of a solution, its counter-proposal. Such an awareness of multi-layered reality can and ought to be continually cultivated by us. What can help us in that, are just such problems as have been collected here. What can help in the long run, are our reflections on the nature of solving chess problems. If in a moment, we try to highlight the principal circumstances conducive to creative thinking – summing up the observations compiled during analysis of the 120 problems gathered here – we do so only to open another chapter. But that will now be written, by all of the readers of these words, with their own games and by their own creativity.

Here then are some *do's and don'ts* concerning chess creativity that occur to us at the end of this chapter.

1. Do not look upon piece value as something fixed: that a pawn is 1 point, a bishop or knight 3, the queen 9. These values can alter according to the disposition of forces on the chessboard. We are sometimes inclined to slightly revalue a bishop at $2\frac{1}{2}$ to $3\frac{1}{2}$ points, a strong knight in the center at 4 points, but a displaced knight at 2, and the like. However, it could also often be the case that even a bishop or a few pawns could, under certain circumstances, have a greater value than a queen.
2. When you are solving a problem, promise yourself that you will try to solve it unconventionally, creatively, and not according to some established pattern. Keep this aim in mind!
3. If you have just completed a solution, then consider whether there is not another, even more interesting path. Look for apparently “silly” ideas as possible solutions too. You then have a greater chance of finding something worthwhile that others passed by unawares.
4. Try to consider each problem from various points of view.
5. Do not be afraid of difficult solutions. You are in a position to solve every problem! Even if you are unable to work everything out, you can rely on your intuition.
6. Try to determine clearly what the problem depends on.
7. Concentrate on the problem, on what you have to solve “here and now.” Do not think about the incidental consequences of your decisions that have nothing to do with pure chess, such as the result of the game. This is no time for fears and anxieties! It is the moment for *your* creativeness. You have to produce a unique spectacle. Enjoy the game itself!
8. When you experience great difficulty in solving a problem, ask yourself whether it might be that you are going round in circles about the very same proposed solutions. Give some more thought to the aim that you want to achieve. Widen the scope of your searches. Take a short break and start afresh.

9. Try to postpone, for the time being, all evaluations: “this is good, that is bad.” Every idea, even one that at present seems doubtful to you, may turn out to be good after detailed analysis.
10. Try to recall whether you know a similar problem or exercise – and how you solved it.
11. Try to determine what is “foreground” (especially important) and what is “background” (less important) in the given problem. After deciding that, reverse the relationship – try to perceive important things in the background and devalue the foreground.
12. Remember, you can solve every problem! Above all, be *The One Who Solves Problems*, and not just the one who wants to win, to gain points, at all costs.

8. ARE YOU A CREATIVE THINKER?

Know thyself! In the table on the next page are the main factors facilitating creative thought. Be as honest and objective as you can, and for each of the twenty factors place an “X” in the column that best describes you at the present time. You will thus obtain a profile of your strong and weak traits in the field of creativity, and will then be able to concentrate on appropriate aspects in your development. In addition, such a profile will be useful for comparison purposes, and to monitor progress. The numbered column headings indicate:

- 1 A very weak trait of mine
- 2 A weak trait of mine
- 3 A strong trait of mine
- 4 A very strong trait of mine

FACTOR	1	2	3	4
1. Clear hierarchy of values				
2. High self-esteem				
3. Self-confidence				
4. Independent judgment				
5. Critical testing of information				
6. Ability to refrain from evaluation				
7. Glancing intuitively at a problem				
8. Acting committedly and enthusiastically				
9. Persistence				
10. Ability to concentrate				
11. Openness to new ideas				
12. Curiosity about the world				
13. Originality				
14. Flexibility				
15. Capacity to enjoy oneself				
16. Imagination (skill at visualization)				
17. Sense of humor				
18. Willingness to take risks				
19. Ability to take quick decisions				
20. Artistic interests				

Readers who are interested in further work on their creativity are referred to the Selected Bibliography, and in particular the books by Tony Buzan, and by Edward De Bono.

V Psychological Training

Though psychology's great significance in chess is often stressed, one can get the impression it is a field where more is said than deliberately and systematically done. Similarly, the reverse is true – there are many unexploited possibilities of chess research that could be taken up by psychologists. Meanwhile the combination of psychology and chess is important in every serious player's practice. All authorities stress this. (See the bibliography, at the end of this book, which contains a sample of relevant works by the various psychologists and therapists mentioned here.)

There is no doubt that every chessplayer intent on further development works out his own methods for self-discipline, tournament regimen, cultivation of peak form and fitness, etc. Here we shall show one possible model of a systematic approach to self-development. The present chapter discusses a year-long program for young chessplayers, as prepared within the context of practical activities, progressive and repeated sessions with juniors in different parts of Poland. It was also warmly accepted by adult chessplayers; chess can be a touchstone of character, irrespective of age. Presented here are the theoretical underpinnings and some practical exercises.

The program rested on five “pillars.”

1. Setting goals.
2. Positive thinking.
3. Stress management.
4. Character development.
5. Positive self-image.

The choice of these rather than other directions of work was based on the achievements of contemporary sports psychology, and also on psychologies of self-betterment and character development. In principle, the activities were designed to aid the harmonious and rounded development of the young person, and were not limited narrowly just to chess. The pillars will now be considered in turn.

1. SETTING GOALS

*You got to have a dream
If you don't have a dream
How you gonna have a dream come true?*

“Happy Talk,” Oscar Hammerstein II

It is currently accepted in psychology that one of the most crucial pre-conditions for attaining success in sport, business or one's private life is to set oneself appropriate goals. For a goal (or desired outcome) to be correctly formulated, it has to satisfy many criteria. Here are the most important of them. A goal should be:

- **Measurable.** Every day the chessplayer is able to check whether he is getting closer to achieving the goal.
- **Concrete.** The goal refers to observable behavior.
- **Positive.** The formulation of the goal is not “I won't get upset” but “I shall keep calm!”. Not “I will try to” but “I will!”.
- **Ambitious.** The goal generates enthusiasm and is motivating.
- **Realistic.** The aim is high but realistic.
- **Limited.** There is a set time to achieve the goal, and it is clear when it has been achieved.
- **Consistent.** The goal is in harmony with other important goals and values.
- **Satisfying.** The training or practice for the sake of the goal is pleasurable in itself.

It is worthwhile, at certain moments in one's career or self-development, to mark out the most important goals, according to the division below, for instance:

- Main career goals.
- Long-term goals to do with the main career goals one has set for oneself.
- Detailed goals emerging from the long-term goals.

Some examples:

- Main career goal – to become a Grandmaster.
- Long-term goals – to analyze and personally annotate, with reference to the existing literature, 300 of David Bronstein’s games.
- Detailed goals – to create a catalogue of the most important positions from Bronstein’s games in which he broke the basic canons of chess strategy and tactics, and to write an article about this for a chess periodical.

The young chessplayer can, on his own, or together with a trainer, establish a very extended plan for realizing concrete goals over a very wide scope. The plan could for instance cover the following elements:

- openings;
- the middlegame;
- endings;
- training for a tactical sense in chess;
- training in chess strategy and positional play;
- deep knowledge of one’s “hero,” a chessplayer on whom it is possible to model oneself;
- general erudition and knowledge of chess culture, both contemporary and historical;
- arrangement of match and training schedules;
- tournament tactics;
- development of physical and mental toughness.

Ultimately it is possible to create a definite “model master,” a projected ideal commensurate with the individual predisposition of the competitor. The effect of an overall approach to the realization of goals can be the contestant’s clear awareness of what skills he must acquire during the several years of the training process.

At this point it is worth responding to three questions.

1. What am I to do?
2. How am I to do it?
3. Why am I to do it?

The response to the first question marks out the direction of activity; the response to the second, refers to the method of achieving the goal; the response to the third gives the motivating factors and incentives to ac-

tion. Let us see an example of such a pattern in practice.

- What? Reach the master level in f2-f3 against the Pirc Defense.
- How? Through daily study of the games of top Grandmasters.
- Why? In order, in the forthcoming season, to capture a GM scalp.

It is especially important to nurture the third element in the trio, the “Why?”. It is the trainer who fulfills a very crucial role in the creation, maintenance, and reinforcement of the competitor’s motivation. The trainer or coach has to ensure that the training is suitably varied to avoid monotony, and that the player feels personally involved in the planning process, and also tastes some success along the way.

It is also worth stressing that nowadays an accent is placed on projecting a long-term career; this applies not only to sport. The plan below forms a transferal of this thinking to a concrete division of activities.

Planning	Execution
Training exercises	minutes
Training sessions	hours
Training period	day
Training micro-cycle	week
Training mezzo-cycle	months
Training macro-cycle	year
Schooling stages	years

To conclude this section about the significance of goals in the development of young chessplayers, we present one possible example of systematic work towards the achievement of goals.

EXAMPLE

Chessplayers from a certain region ought to initiate thematic opening groups. For instance, a trio of competitors could become specialists in the line **1.e4 d6 2.d4 ♟f6 3.♞c3 g6 4.♙e3** followed by f2-f3 (which defines the variation) and ♖d1-d2, intending queenside castling and a

kingside pawn storm, as an active way to react to the Pirc Defense. Here are the recommended steps.

INTENTION

1.1 Set up the group, fix a meeting place and time, assign duties and responsibilities (what consequences will be suffered if the work is not completed on time). Establish the standards of work with the trainer; in particular, what the group wants to achieve, and how much time should be allotted to realize the particular stages (and at what point to conclude the experiment).

KNOWLEDGE

1.2 From databases, books, magazines and bulletins select all the relevant games by specialists in this system (e.g. Leonid Yudasin, Nigel Short, etc.).

1.3 Look through all the key games at home on one's own.

1.4 Choose a set of critical positions (those given an evaluation of “unclear” in commentaries).

1.5 Analyze the critical positions within the group; select appropriate plans for the middlegame, and prepare novelties to try out.

1.6 Organize an internal thematic tournament or training matches based on the critical positions (e.g. a rapidplay).

1.7 In summation, write a joint theoretical article on the subject of f2-f3. The article will be the group members' secret weapon; for up to two years it will be constantly updated with experiences from tournament games.

GOAL TO ACHIEVE AT THIS STAGE: The players will possess knowledge of the given variation to a level of 2400-2500 Elo. The trainer should assess whether specific goals have been achieved by testing:

- whether the competitor accurately remembers the most important games;
- whether the competitor is able to state the main variations along with

- the lines' end assessments and the further game plans;
- whether the competitor is able to state all the critical positions that are important for a final assessment of the f2-f3 line;
- which novelties the competitor has prepared in this line;
- (through game analysis) whether the competitor played the opening itself at Grandmaster level.

SKILLS

1.8 Tournament games – all the participants of the group share analysis, games, and notes.

1.9 Checking and researching whether improvements have been introduced into variations already played.

1.10 After a two-year watershed, publishing a theoretical article in a foreign chess periodical.

GOAL: The competitors to reap certain benefits; they will:

- gain familiarity with an opening variation at the highest level;
- learn the principles of teamwork;
- adopt professional habits in work on openings;
- understand some principles of the perpetual evolution in chess.

Through such a systematic approach chessplayers will attain another goal. They will learn the good habits of a professional approach to the long-term solving of problems, which may be useful in their future careers, for example in management.

1.11 Applying the above methodology to a freshly chosen opening variation, there is a transference of skills, of work habits, as well as the benefits of so called “learning transfer” (whereby it is easier, for example, to master a second or third successive foreign language).

2. POSITIVE THINKING

Introduction

On the road to achieving the goals one has set, the literature unanimously confirms the power of positive thinking. This power, stressed by psy-

chologists, is also documented by medical research.

Therefore, the second pillar of psychological training is the development of a thoroughgoing philosophy of positive, affirmative, realistic thinking. Martin Seligman, the distinguished American researcher on the subject of optimism, studied thousands of people and came to the conclusion that in many situations pessimists give up more easily, and more often go into depression. It was Seligman who uncovered so-called “learned helplessness,” in which a person comes to expect failure. And it was he who discovered many techniques that make it possible to overcome this helplessness, to change a pessimistic view of the world into an optimistic one. According to Seligman, if we always regard our misfortunes as our own fault, then further personal calamities will befall us. This can operate on the principle of what is called the *self-fulfilling prophecy*.

In Seligman’s view, psychology in the last two decades of the twentieth century clearly shows a picture of man as being able to choose his own way of thinking. To use the language of decision theory, we would say that man is self-directed, i.e. he himself takes responsibility for his own actions, and also for how he *thinks*. One appropriate slogan illustrating this attitude is, “It is not important what happens to me; what is important is how I react.”

Familiarity with Seligman’s and others’ findings is also important for achieving success in chess. That is why it is good to become acquainted with his theory. Here we shall concentrate on selected methods that chessplayers can apply during psychological training. Let us start with methods derived from Seligman’s theory.

The five stages of cognitive therapy

Seligman proposed a step-by-step method of releasing oneself from the barrier of pessimistic thinking. Here it is.

1. One has to recognize those automatic thoughts that occur in our minds at the worst moments in life. Example: *I will never be cured of these infinite time troubles.*
2. One has to control these automatic, negative thoughts, and gather evidence disproving them. Example: *When I am prepared in the opening, and the game plan emerges naturally from it, I do not get into*

time trouble.

3. One has to learn how to create new explanations called *reattributions*, and employ them against the automatic thoughts. Example: *I am able to manage the clock in a chess game.*
4. One has to learn to free oneself from oppressive thoughts. Example: *In every game this season I shall leave myself with five minutes for the last move before the time control.*
5. One has to learn to recognize one's "false assumptions" (cf. the list of misconceptions below).

One possible exercise is to identify and commit to paper one's own automatic thoughts and false assumptions; then to carry out a transformation, availing oneself of a so-called "dictionary of change."

Dictionary of transformation

The words we use influence our thoughts, emotions, and actions. If we change the way we use words, we change our thoughts and feelings, we change our lives! Words have an influence on what we experience, and how we experience it. Words create new patterns in our nervous system. Words also elicit corresponding states of mind in the people with whom we live. It is clear that words produce biochemical changes in our bodies. Words elicit emotions.

For instance, we could carry out a little experiment, alternatively calling someone *Sir*, or *Your Excellency*, or *Hey, Stupid!*. Would we not sense a change of atmosphere in each case?

Words as labels can elicit various emotions and feelings. The choice of one word can drive you into apathy, the choice of another, into action. Here are some possible examples from a dictionary of transformation.

- *I am on my own* (a premature point of view) – I am available.
- *There is conflict here* – There is future understanding here (lengthens the perspective positively).
- *This is a problem* – This is an opportunity (broadening the point of view).
- *I am sorry* (This can cause an emotional decline in mood) – Please forgive me.
- *This traffic jam is terrible* – At last I can listen to that new cassette.

In chess practice the trainer ought to draw close attention to the vocabulary of his trainee. The words we use have an effect on our thoughts, emotions, and actions. To repeat: if we change the way we use words, we will change our thoughts and feelings, we will change the way we live our lives!

P-L-A-N-K

Seligman's model of positive thinking can be regularly introduced into everyday life with the help of a method that here we shall call P-L-A-N-K. Here it is, preceded by a short introduction.

Would you be able to walk along a stiff plank of wood, 10 inches wide, and 10 yards long, placed on the floor, without losing your balance? And let us quickly add that the plank is placed flat, not on its edge. Your reply would almost certainly be *Yes!*.

And would you be able to walk along that same plank if it was suspended a yard above the ground? Perhaps your reply would again be *Yes!*. But would you be able to walk along *that very same plank* if it was securely suspended 30 yards in the air? We doubt if you immediately and unequivocally answered *Yes!* as before. Yet it is exactly the same plank in each case. Maybe you would pause to think about it; perhaps you would start to inquire after further information by asking *For how much?*. Which would be quite right – when taking a risk, it is worth knowing what for. But it is also right to point out that the risk arises in your own mind. After all, you can certainly walk along such a plank, can't you? About the two earlier heights you had no doubts, but now you yourself create obstacles. Anyway... let us get started!

1. Problem – A difficulty or a destructive situation:

I experience fear and anxiety prior to games with very strong competitors.

2. Labeling – Self-assessment and prior beliefs:

I make the assumption about myself that I am no match for aces like them.

3. Aftermath – The outcome of such an assumption:

I do not even try to "lock horns"; already I expect defeat.

4. New evaluation – Questioning of the assumption:

I can beat even the most demanding opposition!

5. Knockout!—Activation:

I will draw up a plan to beat a specific opponent – and then actually beat him. I can visualize the success!

Who will be your first victim? In difficult situations listen to your internal dialogues. Do you overhear negative assessments of yourself? If so, apply the P-L-A-N-K method!

3. STRESS MANAGEMENT

Introductory comments

The next, particularly important element in fashioning a chess career is the skill of coping with stress. For a period of many years, a chessplayer will operate in conditions of extreme competitiveness, and uncertainty as to the result of his actions; all that time he will run the risk of his self-image being contradicted from outside. It has not been conclusively established whether continually waging battles and exposing the rationale of one's ego can have a negative effect on developing interpersonal relationships in the family, on forming regular relationships at work, etc. That is why it is important to have the skill to solve problems in an optimal way, that is, in a way that reinforces strengths but does not harm the inter-personal environment.

For example, in business and other demanding professions, the skillful union of work with family life is such a difficult problem. Too great an involvement with one's career, even if crowned with successes, can have a detrimental effect on home life. (There is insufficient time, for example, to maintain good relationships with one's spouse or children.) It is no surprise that a business journal once asked the question, "Why do the best directors make the worst parents?". Or that when politicians resign, or sportsmen retire early, they very often claim that their departure is "in order to spend more time with the family."

Let us begin by establishing what stress is. Here is a definition that might have been randomly plucked from almost any textbook on the subject. "Stress is the psychological and physiological reaction to a situation (a demand or threat) *perceived* as exceeding one's resources for dealing with it." Mental stress, therefore, is a state of heightened system activity; it is also a state of increased emotional tension. Stress is an organism's

state that can be produced by various causes, which are called stressors. There occur connections between the concrete behavior and its accompanying physiological and emotional symptoms. This interdependency is exhibited by changes in the following (among others). No wonder we *feel* stress when we do!

- Galvanic skin response
- Skin temperature
- Sweat excretion
- Blood pressure
- Heartbeat rate
- Heart's bio-electrical activity (ECG)
- Rate and depth of respiration
- Pupil dilation
- Saliva excretion
- Peristalsis of the alimentary canal
- Muscle tension and palpitation
- Blood glucose level

Chess contests usually take a long time. The period in which a player is in a state of constant nervous tension and readiness is lengthy. Isolating oneself from the contest atmosphere, and forgetting about the impending start, is hard for some chessplayers, but is a particularly important task because it is tied to the maintenance of physical and mental well-being—of close friends and family too. Oleg Protopov, several times an Olympic figure-skating champion, considered that “it is not the performance that is the most difficult, but the waiting for the start.” In chess the wait for the start can, besides the usual opening preparation, be helped by such methods as taking a walk, solving chess problems, breathing and relaxation exercises, meditation or yoga, or reading an interesting book.

Let us look at some examples from the competitive life of great champions; how they coped with maintaining a state of fighting preparedness while avoiding pre-match nerves. The ice-skating couple Protopov and Bielolusova did not watch the appearances of their opponents, and only turned up at the rinkside just before the commencement of their own program. The speedway star Ivan Mauger slept in the locker room right up to the start of the races. The cricketer Viv Richards also liked to “grab some shut-eye” before going in to bat (but took care to choose a quiet corner away from his prankster team-mates).

It is good to be aware that reactions to stress can have three phases:

1. Alarm reaction
2. Resistance phase
3. Exhaustion phase

In the first phase, that of alarm, the organism is mobilized to face the problem – “fight or flight.” This is beneficial in so far as the organism is rightly alerted to a new situation and aroused to appropriate reactions. In the second phase the organism adapts itself to the newly existing circumstances, operating “at higher revs.” If stress persists, then in the third phase there is a violent breakdown – illness may occur, and eventually, in extreme cases, even death. That is why it is good to control one’s emotional state, mood dependency, level of motivation, etc.

To cope with the stress arising from chess activity, trivial techniques are insufficient. Action must be taken on several levels.

1. **Physical.** At this level the chessplayer takes care to “hone the blade,” strengthen his vitality, his personal energy. Outdoor activity, physical exercise, and participation in sports ought to have a permanent place in his training.
2. **Verbal.** The player strives to think positively, searching for ways out of tricky circumstances. He does this at a conscious, cognitive level, finding new, positive meanings for difficult situations.
3. **Attitude.** At this level the chessplayer tries to build deep and friendly relations with people. He meets other chessplayers who also think seriously about their progress, and who train systematically; he establishes contacts even with the representatives of other sporting disciplines since this gives good opportunities for swapping experiences. He remembers the importance of relaxing among friends.
4. **Values.** The player tries to give sense and meaning to his life. He attempts to understand his place within a wider or “higher” scheme of things, whether political, religious, or ecological, etc.

Only the control of these four levels can create a sound basis for self-management under conditions of great pressure during a sporting career lasting many years.

Above all, prophylaxis!

Chessplayers should already be very familiar with the term *prophylaxis* because of its use by Aaron Nimzowitsch to mean the anticipation and frustration of the opponent's plans by precautionary action, which is an essential element of good chess strategy. Away from the chessboard, prophylaxis is also good strategy in dealing with the stress-inducing, unknowable plans and calamities that life may have in store for us. Prevention is better than cure. That is why it is worthwhile considering counteracting stress before it occurs. Here are the basic steps to take, which will enable one to face stress, realize goals, and develop mental resilience.

- Create a clear system of values – establish what is most important to you in life.
- Train your willpower and character – treat this as a lifelong task.
- Build appropriate social ties with other people.
- Benefit from the support and help of others; do not shut yourself off.
- Construct a positive self-image.
- Learn about assertiveness, and communication skills; read something about emotional intelligence (*EQ*).
- Observe yourself during difficult moments of social interaction, and draw useful conclusions.
- Employ methods of emotional self-control; master some relaxation technique.
- Be conscious of your internal monologues.
- Concentrate on completing exercises – be “task-oriented.”
- Make effective use of your time.
- Be physically active, and eat a healthy diet.

Despite various preventive efforts, stress will nevertheless occur. After all, it is an unavoidable element of life in sport. Here are a few ways to cope with it.

- Above all, realize that what you are experiencing is indeed stress!
- Relate the actual situation to your system of values.
- Distance yourself from events; take advantage of other perspectives, like time.
- Change negative thoughts for positive ones.
- Seek out help and support from others.
- Act positively straight away. Do something positive – anything – in order to break out from the torpor or inactivity.

- Find new evaluations for the situation; use a dictionary of transformation, for example.
- Reduce muscle tension by breathing exercises.
- Turn to uplifting music and humor; these may prompt you to sing (which regulates breathing) or laugh (which relaxes muscles).

Irrational thoughts

Our conduct, and our susceptibility to stress, can be affected by negative and irrational assumptions that we accept in our internal dialogues. Here are some misconceptions, based on those by Albert Ellis.

- ✗ We must be loved by everyone, and everyone must approve of what we do.
- ✗ We must always be competent, act effectively and appropriately to the situation; we must be intelligent, bright, and other people must show us appreciation, respect, and esteem.
- ✗ Certain human behaviors and actions are shameful and immoral, and the people who engage in them should be severely punished.
- ✗ It is a terrible catastrophe if matters and affairs do not work out as we had wished.
- ✗ The misfortune and good luck that befall us are the result of the actions of outside forces, which we are powerless to oppose; we have no influence on these events, and cannot control them.
- ✗ If we wish to avoid bad luck and failure, we should think about what is threatening and dangerous to us.
- ✗ It is easier to live by avoiding trouble and responsibility.
- ✗ We should be entirely free and independent from everyone and everything.
- ✗ Our mental life, our actions, are determined by our history, upbringing, and childhood. It is impossible to free ourselves from the actions of the past.
- ✗ Anything short of perfection is failure.
- ✗ How other people behave towards us is particularly important. We should spare a lot of effort to change other people and their conduct.
- ✗ Each problem has only one good solution, and if that method fails to be applied, the results will be lamentable.
- ✗ In principle, man is the victim of his feelings and passions, and thus cannot really control them.

Those were a baker's dozen of irrational maxims that make our lives more difficult. As usually happens with this sort of listing, every chessplayer could, after a moment's thought, add some of his own.

Exercising self-control

Self-control exercises, which chessplayers could take up, take advantage of the biological phenomenon of "reverse compression," or biofeedback. In mental training, chessplayers ought to concentrate on the following groups of problems.

1. Awareness of the main goal and intermediate goals that they want to achieve.
2. The art of being focused, but not tense.
3. Psychological training in relaxation.
4. Psychological training programmed towards the attainment of the goal.
5. Psychological preparation for specific contests, taking the specific circumstances into account.

Relaxation is one of the recommended anti-stress techniques. Relaxation, or the release of tension, has for many years been employed by sportsmen all over the world. A variety of research confirms that relaxation training can bring the person concerned many benefits. Here are some of them.

Physical and physiological changes:

- more effective rest
- faster mental and physical recovery
- slower breathing
- deeper breathing
- slower pulse
- normalization of blood pressure
- muscle relaxation
- slowing of brain wave rhythms
- ability to discover signs of strain early on, and to relax the muscles
- ability to work longer with less fatigue
- improved digestion
- reduced risk of heart disease

- reduced possibility of relapse of various illnesses (e.g. respiratory, and skin-related)

Psychological changes:

- feeling of inner peace
- release from depressive, anxious, aggressive, or destructive states
- increased self-confidence and self-worth
- improved memory
- improved learning
- better attainments at work and in other domains, with less effort
- more frequent feeling of positive emotions
- overcoming of passivity or aggression
- perception of new possibilities of action and development
- reduction of symptoms of physical complaints
- improved concentration
- elimination of destructive behaviors (smoking, over-eating, etc.)

Attention also has to be drawn to certain dangers, which may cause relaxation training to be ineffective:

- expectation of immediate changes
- external noise
- distracting thoughts
- insufficient concentration
- peculiarity of the situation

Generally there is no problem nowadays finding relaxation cassettes; choosing the most appropriate one for a given competitor may be the only difficulty. Certain additional negative effects have also been observed. Even when young persons are convinced of the worth of relaxation, they have problems with the training's regularity and persistence.

Models of self-control

In order to build a strong and stress-resistant personality, you can take advantage of the signposts indicated by an expert in "mining" human resources, the American hypnotherapist, Milton Erickson.

1. Concentrate on what is possible, not on what is ideal and perhaps

- unattainable. Pay attention to what you can do “here and now.”
2. Focus more on the future, not on remembering how things used to be.
 3. Examine situations objectively. Stand back and look at things from different perspectives, not subjectively.
 4. Do not order others about, but take advantage of their normal behavior to achieve mutual benefits.
 5. Rely on your own experience to a great extent. You do not always have to depend only on so-called authorities.
 6. *You* are responsible, to the greatest degree, for your own behavior.

Erickson’s school of therapy was later developed by other psychologists and psychotherapists within the bounds of neuro-linguistic programming (NLP). These later practitioners fashioned many effective methods to change assumptions, self-communication, and emotional control. The latter in particular could be thought-provoking and useful to chessplayers.

On what does the skill of making the choice of “feelings to be steered by” depend? Here is a model composed of several stages (after Leslie Cameron-Bandler, and Michael Lebeau).

1. Establish what the specific difficulty at hand is.
2. Above all, one’s feelings must be identified; for instance, those such as:
 - patience
 - calmness
 - decisiveness
 - boldness
 - resignation
 - acceptance
 - frustration
 - disappointment
 - caution
 - suspicion, etc.
3. Ask yourself this question, “If in this situation I have a sense of, or I experience [some particular feeling], what will be the consequences of that?”
4. After establishing the various consequences, the optimum course of action for the given situation should be chosen.

Example:

1. *The situation is prior to playing the decisive last round.*
2. *Excessive emotional tension occurs.*
3. *Under excessive emotional tension I will not calculate variations so well.*
4. *I have to realize that the “final round problem” is an integral part of tournament life, and always will be. If I play well, then I will always be playing important games in final rounds. So, it is my daily bread and butter.*

In learning the art of directing one’s emotions, the chessplayer ought to master the related art of changing across to opposing emotions (the transformation of one’s feelings). Here are the skills.

- Exchanging impatience for patience
- Exchanging a feeling of incompetence for self-assuredness
- Exchanging unimaginativeness for creative responsibility-taking
- Exchanging disillusion for frustration (because the goal to be reached becomes clear!)
- Exchanging disillusion for acceptance (because one has to be able to reconcile oneself to defeats, for example)
- Transforming boredom into pleasant expectation
- Exchanging apathy for curiosity
- Exchanging overwork for motivation

Here is an example of transforming feelings through the identification of positive states of mind.

The initial state is that of hope, which also contains elements of doubt and passivity. That is why it is exchanged for expectation, in which state a person is optimistic about something happening.

Selected techniques and models of positive conduct

It can happen that a chessplayer himself creates mental impediments to his own goals. Here are the most frequent ways of falsifying reality, and ways of resolving these problems.

1. UNCLEAR SUBJECT

“People here don’t allow me to be independent.” – Which people specifically?

2. UNCLEAR ACTION
“Mister trainer, you’re **ignoring** me!” – **How** exactly do I do that, in your opinion?
3. UNCLEAR COMPARISON
“I’m sorry, but my play was **hopeless**.” – Hopeless compared with **what**?
“Now I make **fewer** opening errors.” – In relation to **what** are they fewer?
4. OPINIONS MASQUERADING AS FACTS
“This is the **most appropriate** way of carrying out the plan.” – In **whose** opinion?
5. GENERALIZATION
“I **always** play worse in winter.” – **Always**?
6. UNCLEAR IMPEDIMENTS
“I **wouldn’t be able** to beat a Grandmaster.” – **What** is stopping you?
7. UNCLEAR URGES
“I **must** qualify for the final” – You **must or you want to**?
8. DISTORTION OF REALITY
“**You** irritate me!” – **How** is it possible for me to irritate you? Who decides on your mood?

If you want to be a winner, you have to think and feel like one! This chapter ought to be a good signpost, but a signpost is not the path itself. *You* have to take that path. That means work on your character, which is the subject of the next section.

4. CHARACTER DEVELOPMENT

William Steinitz’s famous dictum, that “chess is not for timid souls,” can be treated as the starting point of systematic work on one’s character. The signposts below may be useful along the way. They are a summary of the ideas that can, above all others, be incorporated into the development of chessplayers with “warriors’ souls.”

1. **Planning.** The ability to plan realistically is what sets successful people apart. For example, plan your activities every morning before the start of the day. Plan your development long-term, arranging yearly training and match calendars.
2. **Management.** On the one hand, this can be the management of time

– accounting for the projected hours, days, and months. On the other, this should be the management of goal achievement – checking whether the planned-for skills have been acquired.

3. **Self-diagnosis.** You have to obtain an insight into your mental attributes. It is worthwhile asking yourself several important questions about your own activities

i) What have I already done to develop chessically? (Objective analysis is required here.)

ii) What more must I do? What? How? Why? When? Where? Who can help me?

iii) What would I like to be in five years' time?

iv) In what way am I now bringing the future about?

v) What is my assessment of the results (victories and defeats) up till now?

vi) Which excuses do I fall back on?

vii) What is my dominant attitude to life?

Furnishing the answers to these questions will enable that very important insight into yourself.

4. **Intellectual development.** Strive for ever-better understanding of the world, and follow the ideals you believe in. This will help avoid the dangers of lop-sided personal development.

5. **Willpower training.** Your willpower should be trained so that you can realize its greatest possible power and integrity. Try to develop the quality of tenacity. The positive results of many efforts will be visible only after a long period of time.

6. **Positive thinking.** Censor unfavorable ideas and negative thoughts. Do not poison your mind and your volition. Develop your imagination on useful material.

7. **Emotional mastery.** Success in professional and private life is achieved by people who are able to control their emotional life. Strive for mental calm, a robust way of living, and the renunciation of bad habits.

8. **Active testing.** Practice the correct carrying out of actions. Be guided by the famous Japanese principle of *kaizen* – the idea of constantly improving oneself.

In our work with young Polish chessplayers, we worked out many means of developing a chessplayer's character. Here are some of these proposed ways of "Willpower Training." Some of Poland's top juniors, of both sexes, participated; these youngsters are now making an impact on adult tournaments.

(NB: Not all the following activities will be suitable for all participants. Their appropriateness and duration for a particular player will depend on his health, age, and fitness, among other things. *None of the activities should be taken to extremes, and no one should be subject to coercion.*)

- 1) A day without speaking. (Not as bleak as it sounds. This can result in as much amusement as frustration.)
- 2) Solving chess problems almost “till you drop.”
- 3) Skiing, hiking, canoeing, rock climbing, etc. Any sporting activity that will perhaps be slightly unfamiliar (possibly because it has special requirements as to equipment and/or location).
- 4) Sticking to difficult resolutions, such as a few days without (a choice of) either TV, sweets, gossip, mobile phone conversations, access to computers, etc. (Of course, what counts as difficult in such a list will vary widely from person to person.)
- 5) A number of sit-ups or push-ups, morning and night, for several weeks.
- 6) Taking timed physical exercise tests.
- 7) Organizing a “Day of Chess” – helping to set up and run a day-long program of varied chess activities (displays, quizzes, and mini-tourneys, etc.).

Another recommended way of building character and developing perseverance is the systematic keeping of a “Sporting Diary.” This would be suitable for someone of any age. The diary could include:

- Personal analyses and Grandmasters’ observations
- Information about books and magazines
- Information about interesting pages on the Internet
- Results of medical and dental check ups
- Year-long training program
- Year-long tournament program
- Quarterly plan of activities
- Monthly/weekly timetable of lessons/lectures or work shifts
- Roster of household chores
- Exam and revision timetable
- Monthly comparison of training workload
- Tests and puzzles
- Comparison of results
- Yearly comparison of one’s best performances (to enable planning for the near future)

- Notes and comments
- Other observations and reflections

5. POSITIVE SELF-IMAGE

The choice of the final pillar in the development of the aspiring chessplayer was dictated primarily by co-author Przewoznik's personal experiences of working with youngsters, and with the adult participants of various business courses. Success in sport can, to a great extent, be decided by a positive image of oneself, and awareness of one's strong and weak points. Here are several signs of maturity in seeing oneself.

1. A mature person accepts himself and behaves sincerely towards others. While accepting himself, he also tries to overcome egotistical inclinations. Egotism is the basic symptom of a childish personality, whether developing or immature. In a certain sense chess can pose a threat to the developing individual, because he so exposes his own ego in it.
2. A mature person distinguishes himself by a certain breadth of "me." An individual should not exclusively limit himself to chess career activities alone. An extended "me" means having wide and worthwhile interests, making time for family and friends, as well as being interested in culture and the arts. It also answers Erich Fromm's question whether it is better *To Have or To Be?* (materialism versus authentic experience).
3. A mature person has a realistic self-image. He does not have an exaggeratedly great opinion of himself. Neither does he aim for unrealistic goals. Let us remember not to make the distance between the "real me" and the "ideal me" (the "me" at which I aim) impossible to overcome. A mature person knows his weak and strong points. He has good insight into himself, and through that knows which traits he needs to develop. In forming a picture of our characters, we must not squander the opportunities given by models – models of behavior, other people's models of life. Looking at great chessplayers, we can build into our own picture of our ideal selves their examples of customs and habits as highly successful people.
4. The skill of focusing on internal bodily, emotional, affective experiences is important. Observing oneself during stressful situations can lead to an improved understanding of oneself, and this improved understanding allows one to take more appropriate actions in the future.

You, the reader, have now become acquainted with a certain psychological conception of working at chess, but perhaps that is not the end of the subject for you. If you are seriously thinking about constant improvement at chess, you ought to take its psychological aspects into systematic consideration. There is an old Chinese proverb that goes something like this:

Hear – and you will forget
Hear and see – and you will know
Hear, see and do – and you will be able.

This saying is of priceless value in the psychological work of one's own chess development. Knowledge alone is insufficient – in addition you have to be able to perform. Likewise, we do not benefit much merely from possessing a conscious brain – we must also use it intelligently.

That is why we encourage you to follow the procedures proposed earlier. Some of the books mentioned in the selected bibliography may be a great help to you. You will find in them many concrete recommendations on how to work on specific problems. Remember though, as we said before, the signpost is not the road itself. You yourself must go down it by going through various experiences. We wish you success.

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