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About the Author

Cyrus Lakdawala is an International Master, a former National Open and American Open Champion, and a six-time State Champion. He has been teaching chess for over 30 years, and coaches some of the top junior players in the U.S.

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The Nimzo-Larsen Attack: Move by Move
The Scandinavian: Move by Move
The Slav: Move by Move
The Trompowsky Attack: Move by Move

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Foreword

For the past 8 or 9 years there has not been a single day in my life where I was not working on composing an endgame study. And still I have not found a fitting metaphor for what I am doing.

Chess composition is obviously different from over-the-board chess. There is no opponent, no time pressure. The two disciplines just share the same rules and partially the same audience, though there are plenty of chess players who have no interest in composition – and quite a few composers who have never played competitive chess.

Composition is art, but it is different from any other art that I know of. Firstly, it has a correctness element. Compositions have to be correct, with a unique solution. Try requiring that from Picasso. Secondly, our art can only be appreciated by a very limited audience who know the rules of chess.

It has a sporting element (tournaments, a world championship, ranking lists, judging, etc) but its aesthetic side makes it different from most sports, figure skating being a notable exception.

If I had to compare what I do to some scientific discipline it would probably be archaeology. The beautiful moves, positions and ideas are waiting around to be found (or created, if you prefer to call yourself an artist). The most skilful composer is the one who digs up the best artefacts. The world will then hopefully appreciate the beauty of his discoveries in due time. At times, the artefacts are of such an obvious shiny beauty that almost every chess player appreciates them (Saavedra, Réti's ♔h8-g7). At other times the beauty is of such an abstract nature that hard work is required by the audience/solver. At those times the composer may feel very lonely, regretting his choice of career...

To me, the moment of the actual discovery always brings the greatest joy. Recently I came across a position with K, R and P vs. K, R and P. Black has three defences to stop the white pawn and, after each of these, White sacs his rook in a different way and wins.

I wonder why no one noticed this beautifully simple position before me? Obviously, composition is part addiction as well...

Steffen Slumstrup Nielsen.

Introduction

Neo: Why do my eyes hurt?
Morpheus: You've never used them before.
– Lana & Lily Wachowski, *The Matrix*, 1999

"Language serves not only to express thought but to make possible thoughts which could not exist without it," wrote Bertrand Russell. If we substitute the word "language" with "geometry", the statement would fit perfectly for the majority of composed endgame studies and stipulated mating problems.

Clarification: A chess study is White to play and win, while a composed chess problem involves finding mate in a stipulated number of moves (e.g. White mates in three).

The scriptures say that in the beginning there was the Word, which converted into the world. The chess composition universe is wordless yet made flesh via nearly infinite, anomalous geometric patterns. The conceptual plan of solving the composed study/problem is the poetic dream-essence of mathematics, while the drudge work fabric of implementation is arithmetic. In attempting to solve, I discovered that I am skilled in the former and am a bit of a bumbler at the latter. I quickly grasp the concept/plan and then struggle mightily with its implementation.

Question: Why are composed chess studies and problems so important? After all, virtually every position we encounter in this book is a fictional construct, rather than a real-life battle.

Answer: The point is that a chess game is nothing more than a series of problems placed before us. If we become skilled at solving composed studies/problems, our over-the-board games should feel easy by comparison.

Look, I'm no artiste. I always felt that my job was to win a chess game or, failing that, avoid loss. I retired from tournament chess in 2019 (I suffered a heart attack during a game in 2016 and risked another by continuing to play in tournaments) and took up solving

endgame studies and mating problems instead, just for fun.

At first, they were anything *but* fun. All I got for my efforts were – I apologize for this indelicate imagery! – analytical turds floating all over the board. Belief in my ability began to reduce as disillusionment grew. Then, after a while, the solving of a study or problem – especially an exceptionally difficult one – led to an unfamiliar mathematical euphoria, which I quickly came to crave as a drug to an addict. I even felt a stab of elation at solving a *portion* of a problem.

I had one rule of solving: No computers at the start. I grew up in an era where NASA scientists were the only ones who had access to computers. The rest of us were forced to use our imperfect brains. So forgive me when I state that reliance upon computers is an aphrodisiac for the mentally lazy. Vishy Anand once said that the minute he turned his computer on, his brain solving process grinded to a halt, since it began to allow the computer to think for him.

The world of chess composition is a living, breathing, autonomous state. They too have their Morphys, Laskers, Capablancas, Alekhines, Tals, Fischers, Karpovs, Kasparovs and Carlsens, but with different names, unfamiliar to many of us who live in the "real" chess world.

My lifelong misperception has been that the pursuit of chess studies and problems is a kind of graveyard, where old IMs and GMs go to die. Man, was I wrong! I'd always believed that composed material was designed for those who were attracted to chess for pure aesthetics. I thought compositions had nothing to do with tournament training, since their depth and complexity are often far above our own meagre threshold to decipher and comprehend. Again, I was profoundly wrong. They are *not* mere museum pieces, lacking practical application in real life tournaments. As I continued to work on them, I soon noticed that my online blitz rating rose slightly (nobody gets better at age 59). Then I noticed that when solving basic online chess puzzles, my score improved radically and my solving time reduced dramatically, mainly because they are trivially easy when juxtaposed with composed works.

If I had known about the benefits of solving studies and problems at age eight, I am convinced I would have been 150 to 200 points stronger at my peak. I began introducing them to my students and was delighted with the results. Just one example: Jonathan, age 55, who plays at the San Diego Chess Club, has been in the rating range 1280-1360 for the past 20 years. Then I started him on solving, primarily, mate in two problems. In six months, his rating rocketed over 200 points to its new high of 1576. This is a player who had never cracked the 1400 barrier, who now approaches 1600. This didn't happen with every student, but many saw a rise in their rating, depending on how much time they allocated to their solving.

Complaints about Chess Compositions

"Composed mating problems are inconsequential, due to the stipulation of the number of moves to deliver mate. Who cares if I can't see mate in three moves, when I can do it in four?"

The move stipulation teaches us economy of motion. This translates to over-the-board situations where we may be a rook down with a mating attack. Only one, exceptionally difficult-to-find, move wins for us. If we miss it we lose. You *will* find that impossibly difficult double exclam move in your tournament games if you routinely solve composed works.

"Composed studies/problems are artificial. They have little to no relation to real tournament chess."

If you master solving chess compositions, you will find the combination or hidden plan in your tournament games. You will not get as easily disoriented in irrational positions, since irrational is now your new normal.

As my friend GM Jon Levitt wrote on my Facebook group, *Chess Endgame Studies and Compositions*: "In my view studies are closely connected to real chess and are basically pure examples of unusually fine play. Not surprising that looking at them helps practical play. Problems, even far-removed ones like series helpmates, can also involve patterns that are of some practical benefit, but that is not their raison d'être. They are an art-form. Art can sometimes teach you something about real life precisely because it is not real life." You would be well advised to listen to the GM.

"Chess compositions are just too difficult for me to solve. I will stick with normal, solvable chess puzzles."

This complaint is like the story of the isolated tribe visited by an explorer who doesn't look or speak like them. The tribe takes him for a god, treating him with fear and holy deference, and makes him their king. Then one day the explorer cuts himself shaving. The tribe suddenly realizes his mortality and kills him.

I used to view chess compositions the same way. Now I know they can be killed. It was a 16th Century philosopher, Michel de Montaigne, who wrote: "My life has been full of terrible misfortunes, most of which never happened." Stop thinking that you will fail when solving. You can and will be able to solve, no matter how low your rating. It only requires determined practice.

Practical Benefits of Solving

There are numerous practical benefits of solving compositions:

- You enter the Louvre museum in France, examine some of the greatest artwork ever conceived by the human mind and heart, and you think: "Very pretty!" Such a superficial examination is the way we often analyse during tournament games. When we work on compositions for a while, we begin to realize that our old thought process was mostly mindless reflex rather than a truly in-depth examination of the position's elemental core. In essence we *recognize* our old superficiality, which is the first step to overcoming it.

- Composers are masters of deception and illusion. They inject their work with carefully constructed misinformation, in order to divert the solver from the truth. The schadenfreude – malicious glee – at making the solvers' lives miserable is what composers live for. These evil geniuses insert logical-seeming variations which look like they work, yet don't, due to some geometric quirk. If we learn to navigate such treachery in solving, our over-the-board opponents will seem like naïve bumpkins by comparison.
- When we learn to routinely discover and visualize a composition's core pattern, our over-the-board calculation/visualization/planning/solving skills improve. We *will* be able to keep up with our position's confusion. Essentially, as we solve more, our disorientation in complications decreases.
- Compositions challenge our deeply ingrained delusion that the "natural" move is almost always the best one. Many chess studies and problems are deliberately designed to make the *unnatural* move the correct answer. This literally rewires our brain so that we begin to look for anomalous patterns we wouldn't otherwise consider. Most standard chess puzzles are constructed in formulaic, been-there-done-that fashion. Not so with compositions, which nearly always contain unorthodox twists and turns.
- The composed works in this book are not real battles. Instead, they are *simulated* battles on the Holodeck of Captain Picard's Starship Enterprise, where any environment or character in history can be instantly created. We must learn to bob and weave our way through the composer's imagined dataspheres. We thereby expand the scope from the confines of our normally narrow pattern recognition. If we succeed, our tournament games somehow feel exponentially easier.
- At first we think: "I can't possibly solve this." Then, with practice, we realize we are wrong. The consequence is that our confidence at solving immensely difficult over-the-board challenges soars.
- Composed material is a universe governed by anomaly and irony. If our intended answer looks logical and correct, odds are it is neither. This means that in our tournament games, our eye for geometric anomalies enhances. Our mental reach extends far further than we believe, but only when we practice the application of concentrated effort to solving these seemingly unsolvable mysteries.
- In over-the-board play, our sense of practicality overpowers all other objections. We don't look for the perfect. By solving, we learn how to be unconstrained as we teleport our pieces to any crazy square we choose in our mind's eye. In compositions, there is no room for second best. We cannot get away with stumbling from one drama to the next, as we are so accustomed to in our tournament games. In a study, we never take two moves when one is available.
- We develop a focus and clarity of view which non-solvers may lack.

- The composer's golden rule is there cannot be even an atom of redundancy or extraneous matter within the solution. This teaches us economy of motion in our tournament games. You will get positions in this book where you are a queen (or more) up against the opponent's lone king. The stipulation is that you must find a mate in four and not a single move more. In tournament games, we are careless. After all, what does is matter whether we mate the opponent in four moves or six?
- Scientists are capable of measuring the natural properties and potential of stars, light years away from the Earth. If the human mind can comprehend subjects like this, we too can try to tackle the most painfully difficult chess problem ever concocted. The process, not the answer is what matters. If you go through this book and only solve three percent of the problems in it, I promise that you will be a better player. It's not the *solving* that is the true benefit, it is the trying and straining, coupled with the revelation of the answer, which we have then injected into our mindstream. Even our failures deepen our pattern recognition while simultaneously rewiring our brain. We learn to solve via a combination of applied logic, calculation, ingenuity and frustrated effort. Keep at these and I predict that, within a few years, your mind will have been transformed into a repository of astonishing geometries.
- A poet relies upon the following: memory (pattern recognition), perception and imagery. As solvers, we do exactly the same.
- We become accustomed to competently navigating positions devoid of strategically tangible qualities, especially in stipulated mating problems.
- Our intuition improves, since with even the most horrifically complex problem we may sometimes – to our utter astonishment – correctly guess the answer in a single, intuitive bound.
- My best teachers were always benevolent despots, who pushed us as students *past* the point we believed we were capable of achieving. Solving compositions is another such teacher.
- We become skilled at analysing the present and transforming it to the what-will-be, hidden within the gauzy future.
- Solving intensifies our study, which can often be lazy and unfocused. If normal chess preparation and study is watching a storm in a movie, then solving is getting struck by lightning while outside in a howling storm. Our depth, attention to detail, and level of concentration increases.
- By solving, we escape the tyranny of the mediocrity of shallow perception, since in this mode correct answers will not appear. Unlike listening to a Chopin piano concerto at the symphony or examining a Matisse at the museum, when we labour to solve a study or problem, we do so intensely, as if we are actually part of its creation, rather than a mere passive observer.

- With solving we strive for perfection. Tournament chess players make choices based on satisfaction and minimum requirements: "This looks good enough. It *should* win." As solvers, we slowly alter our mindset to one of a maximalist, who attempts to seek a *single* perfect path to the position's core. We are not allowed to seek refuge in vague generalizations, which we do all the time in our tournament games. There is only one solution, without a duplicate. Miss the answer by a fraction and it may as well have been a million miles. Close doesn't cut it, as it may in a tournament game.
- We learn this important lesson: Often the truth hides behind the falsely tempting answer. We become adept at peeling away layer upon layer, finally reaching the hidden core which reveals the truth.
- Many problems in this book are far more difficult than anything we will encounter over the board. The effect is that of cross training or over training. I had this professor student 12 years ago, who was an ultra-runner and routinely ran 35 miles every Saturday. When a marathon came to San Diego, he would consider it a bit of a vacation! This is the effect we get from solving and then applying it to our tournament games. They will feel breezily easy by comparison.
- With composed works the game never enters an obvious stage, where the lazy annotator can get away with the cliché: "and the rest is technique." Our sense of orientation improves, as we actually feel at home within an unsettling sense of unreality.
- If we are unable to solve a problem via normal means, we learn that a problem or study can be cracked by a Sherlock Holmesian negation system, where we eliminate everything which doesn't work. Then we derive our answer from what remains, which is often the impossible. This system transfers over to our tournament games as well.
- The only constant in problems is their unpredictability. This means that in our over-the-board fights, we will not be jarred or surprised if our opponent hits us with the unexpected, since we are accustomed to this mistreatment from composers. We also become better defensive players, since a key part of solving is not only to find our moves but to anticipate the best defence.

A Few Sample Problems

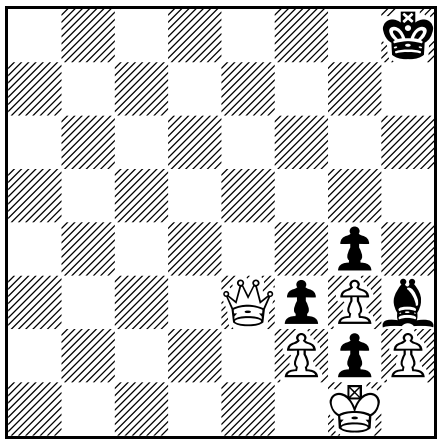
The four positions below all appear later in the book, along with their solutions.

The difficulty of a study or problem is an unknown quantity at the start and therefore not so easily gauged. It only becomes apparent when we either solve or can't solve it. Originally, I was going to post a difficulty level for each composition but then decided against it, since we don't get that hint when we are playing a tournament game. Nobody tells us if the combination we are looking for even exists. And if it does exist, we are not

told whether it's easy to find or difficult.

In the beginning we only receive compartmentalized information, a portion of the whole. It is our task to fill in the blanks. The diagram below is an example of a completely conceptual study, with very little calculation required. It's a study by Otto Blathy, who is kind of the composer's version of Nimzowitsch or Larsen.

124) Otto Blathy
Deutsche Schachzeitung 1962

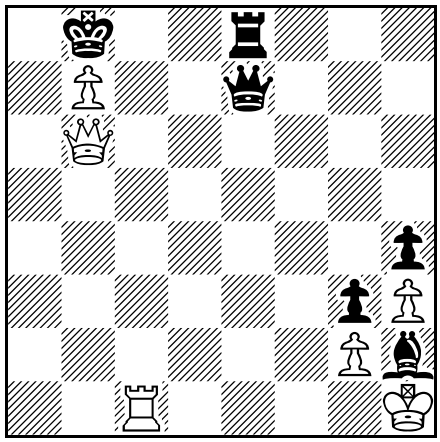


White wins

White is up a queen for a bishop, but there is one colossal obstruction to the win: White's king is the prehistoric insect set in amber, destined never to move again. On top of that, there isn't a single square on the board where the lone queen can deliver mate. And yet Black cannot earn a draw if you find White's correct winning plan.

This problem by Emanuel Lasker is an example of a completely doable study, even for a lower level club player. Black is a piece up yet we can quickly see, from our entombed king's position, that it won't be so difficult to give away our b-pawn, rook and queen and score a stalemate. The question is: can we get greedy and go for the full point?

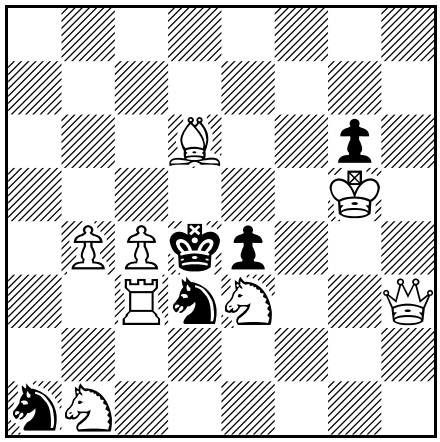
71) Emanuel Lasker
Sankt-Peterburg Vedomosti 1896



White wins

There is no way of resolving the theological dispute in my Facebook Studies and Compositions group, as to which are more beneficial: stipulated mate problems or endgame studies? My leaning is towards endgame studies, but they tend to be more difficult to solve than mating problems. Very few of my students are able to weave their way through complex studies, yet they are all capable of solving mate in two problems – even incredibly difficult ones, as in the diagram below. You will find the solution eventually, though you may strain for 10 or 15 minutes first!

170) William Meredith
Dubuque Chess Journal 1886

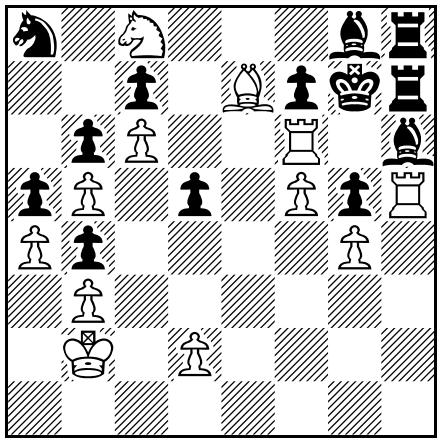


Mate in 2

I have loaded this book with mate in two problems, since I believe they are incredibly beneficial for our tactical pattern recognition. I also placed longer and longer ones (up to mate in 31!), which you don't necessarily need to solve. Just try, and if you don't see a path in five to fifteen minutes, just go through the answer and read the explanations of how I tried (and often failed!) to solve the problem myself. Try an experiment: the day before your next tournament, if you have the time, solve mate in two problems for between two and four hours. I promise you that you will feel sharper than usual the next morning, for round one of your tournament.

When we first attempt to solve a composition, it's no more than an abstract graphics display, a grossly oversimplified view of a far more complex inner reality. The difficulty levels of the studies and problems in this book range from trivially easy to "you must be joking!" impossible-to-solve-even-if-we-had-all-eternity. There are even some which fool the not-so-omnipotent computers. Below is a Fritz Emil Giegold mate in six problem which an older version of *Stockfish* took about an hour to crack. Some advice: Suppress your natural over-the-board street-fighting instincts. The rules of engagement are very different here. I promise you that only MC Escher is capable of solving this one.

295) Fritz Emil Giegold
Zeit-Magazin 1976



Mate in 6

Don't be afraid of the dark. Please step inside. Welcome to the theatre of the absurd. I can't see you right now, but I'm certain you are contemplating the diagrammed position with a blank look on your face. "You have been staring at this problem for hours. Are you ever going to solve it?" asked my wife Nancy. "I don't know," I sobbed, truthfully.

It's the understatement of the century when I claim that it won't be easy to make sense of this fragmented, disjointed mandala. The answer is beyond insane. The club-level player, even one who has reached master strength, is not going to solve all the compositions in this book. Some are beyond the ability of many titled players to solve. Nonetheless, with guidance – this book or solving with a coach – you can and will solve them, since all you require is hints and directions from someone who asks you the right deductive questions.

How to Derive Maximum Benefit from the Book

We need someone to tell us if we are a mile off from the true direction. This book attempts to take on the role of a coach, guiding you through composed studies and problems. Here are my suggestions for making to the most of it as a training tool:

1) For the more difficult endgame studies and problems beyond mate in 3, it is not necessary to find the correct answer. As I mentioned above, it's the process of *searching* which rewires the brain. Together with going over the answer, with explanation, this allows us to see undreamed of geometries and patterns. So analyse with intense concentration for five to fifteen minutes – and if you hit a wall, just look up the answer and compare it to what you would have guessed it to be. Also, many of the problems contain multiple

you would have guessed it to be. Also, many of the problems contain multiple exercises embedded within. Just because you fail to solve the first portion, doesn't mean that you won't solve the second or third.

If you get this book in ChessBase eBook format, then put it into training mode, so that you don't accidentally see the answer; if you get it in book format, then place a sheet of paper under the top diagram and explanation. This way you don't see the next move and must attempt to solve it yourself.

I attempted – mostly unsuccessfully! – to solve every problem posted in this book, when I first encountered it. My process went like this: Considering time constraints, if I stumbled upon the composition's theme within five minutes, I kept working on the problem. If after five minutes, nothing popped up, I looked up the answers with the tag team of *Fritz 17* and *Komodo 13*, coupled with a tablebase for endgame studies. I wrote this book with no pretentions to competency in solving. I merely wanted to jot down my thinking processes – both inspirational and idiotic – in attempting to help the reader understand, as well as to try and rewire my own brain.

2) Modern day chess suffers from hive-mind syndrome. We play popular openings and solve relatively simple chess puzzles, the patterns in which we are all too familiar. This book is an attempt to reverse our complacency, and instead embrace the non-linear, non-conventional and impossibly difficult.

My life up to this point has been a dull one and my idea of wild adventure is to deliver a chess lecture, without the aid of notes. With the happy discovery of chess compositions, I inadvertently stumbled upon my dreamed of creative chess utopia. We will learn to terra-form this scary alien world and make it fit for human comprehension.

3) This book is *not* ordered by themes, or even in order of solving difficulty. Why? Because our real life tournament games are not either. I feel it's more effective for the student (or reader) *not* to be given the theme or difficulty level in advance. I believe that if a theme is repeated, over and over, our solving may turn mechanical. This also means that you may encounter one problem which is relatively simple to solve, while the next is murderously difficult. The point is you don't know which one it will be in advance.

Rather than order of difficulty, each chapter is ordered by date of composition. Since I obtained some of the material from Facebook posts, in some cases I am missing information, such as where the problem or study was first published, though I searched the endgame study database to fill in the gaps, as much as possible. Obviously, from a training standpoint, this doesn't much matter.

I have also placed diagrams every few moves, since the book is designed to be read without the need for board and pieces, should the reader choose this route. It's the kind of book you can read on the subway, or at lunch, where you don't have access to board and set.

4) Sometimes in this book we move away from the parent corporation – the full study – and deal more with the subsidiaries, going to the core of the essential idea, without distraction. Some are impossibly difficult and impossibly long, so I truncated a few of them, stripping them to bearability, to their foundation, to make them more comprehensible. For example, an impossibly difficult forced mate in 36, may be distilled to a far more doable mate in six.

When I looked at older books on compositions, many were close to useless for the average club-level player, since the problems were way too difficult and the answers pretty much always given without explanation or analysis. There was no deductive mathematical reasoning on how we reached the solution. Essentially it was a one-way flow, where we just get the answers without being able to ask questions. To counter-act this issue, I attempted to make this book as interactive as possible.

For experienced solvers, a portion of the material will be a familiar stroll down memory lane, as they will have seen some the problems before. However, I suspect that for 99% of readers the vast majority of compositions contained within will be completely unfamiliar.

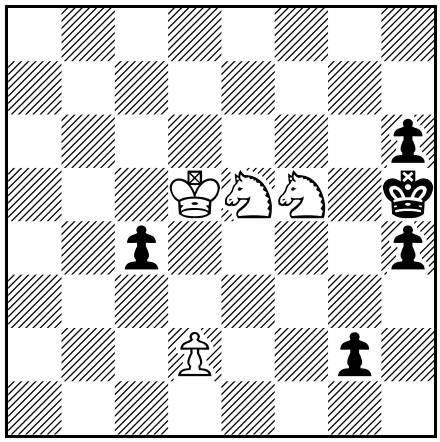
Acknowledgements

The absolute worst part of watching the Academy Awards is when some guy wins some who-cares award, for best lighting or best sound, and then wastes the next five minutes of your life, by thanking people who you don't know and will never meet. So please bear with me. Here goes:

My heartfelt thanks to my buddy GM Max Illingworth, with whom I began our Facebook *Chess Endgame Studies and Compositions* group; to professor Steven Dowd, IM Paul Littlewood and Satanick Mukurthy (who is ChessBase India's go-to guy for composed chess problems) for their tutelage; to Owen Reese, for being such a good sheriff of our page (he ruthlessly kicks out all the spammers!); to composers Steffen Slumstrup Nielsen (who wrote the foreword to this book), Martin Minski, IM Yochanan Afek (who urged me to write the book), GM Jon Levitt, Roger Emerson, Paul Lamford and Michael Pasman (and many, many others) for their original posts in the Facebook group. Finally, thanks to GM-strength tea-maker Nancy for proof reading.

Cyrus Lakdawala,
San Diego,
August 2020

32) Karl Behting
Baltische Schachblätter 1908



White draws

GM John Nunn wrote extensively about this study in a ChessBase article. A group of composers thought they had it cooked and then, a few years later, they promptly declared it uncooked! Thus Behting's 1908 study has, after just over a century, been proven correct and White's next move is the *only* path to the draw.

1 ♔c6!!

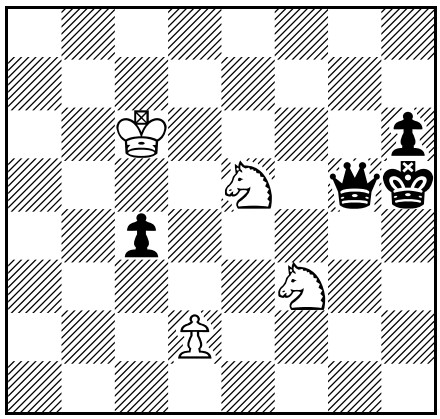
What the hell!? This looks almost like a random move, yet it is White's only path to the draw. The first move is a total stunner.

1 ♘g7+? is the failed cook, which GM Nunn talked about. White fails to draw in this version. The main idea is 1...♔g5 2 ♘f3+ ♔g4 3 ♔e4 h3 4 ♘f5 g1♕! 5 ♘xg1 h2 and the h-pawn promotes. I was originally going to place all the tangled analysis, assessment and reversed assessment in the book but at the last minute decided not to, just to avoid clutter – and, perhaps more truthfully, to avoid my own confusion.

1...g1♕ 2 ♘xh4! ♕g5

If 2...♔xh4 3 ♘f3+ ♔g3 4 ♘xg1 ♔f2 5 ♔d5! ♔xg1 6 ♔xc4 h5 7 d4, both sides promote and the ending is drawn.

3 ♘hf3



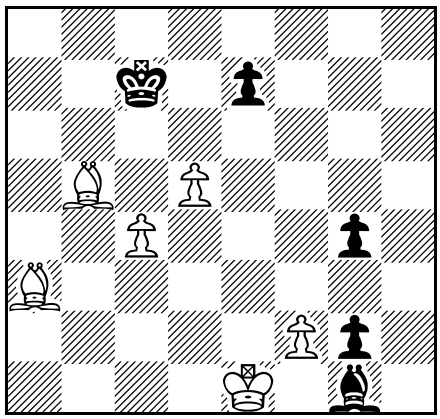
And that's all there is to it. Black's king and h-pawn are locked out, and the lone queen can't do a damned thing about it.

Note that White would reply 3 ♘hf3 to any (sensible) queen move, and that 1 ♔c6!! was the only way to avoid a fatal queen *check*. The necessary black c-pawn ruled out a check on the c-file, and that pawn is now rendered useless because the f3-knight also defends d2.

3...♕f5 4 ♔c5 ♕e6 5 ♔d4 ♕a6 6 ♔c5

And it's a draw. Amazingly, Black can make no progress, despite *Fritz 17*'s erroneous claim that White is completely busted.

33) Hans Seyboth
Deutsche Schachzeitung 1908



White draws

Black threatens ...♗h2 and ...g1♕+. How do we deal with this intent?

1 d6+!!

Push our d-pawn.

a) 1 ♗c5? is the move most of us would play in a tournament game. It loses to 1...♗h2 2 f4 gxf3 3 ♗f2! ♗f4! 4 c5 ♗g5! (threat: ...♗h4 and ...g1♕+) 5 ♗g3+ ♔d8 6 ♔f2 ♗e3+! etc.

b) 1 ♗c6? was a suggestion from a member of my Facebook group. It fails miserably to 1...♗h2 2 d6+ ♔xc6 3 dxe7 ♔d7.

1...exd6

White's pawn cannot be ignored. 1...♔b7? loses to 2 dxe7 ♗h2 3 e8♕ g1♕+ 4 ♔e2 and Black gets mated; e.g. 4...♕g2 5 ♕d7+ ♔b6 6 c5+ ♔a5 7 ♗c6!, threatening the queen and 8 ♕a7 mate.

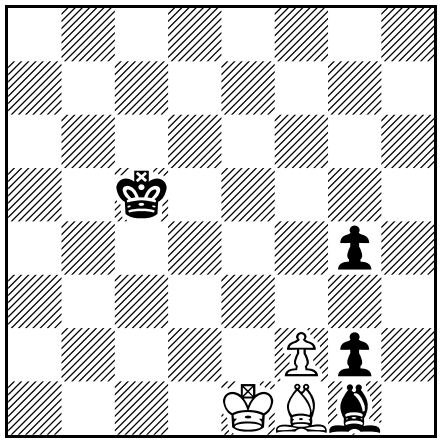
2 ♗xd6+!

Step 2: Sacrifice our bishop on d6, which gains a crucial tempo.

2...♔xd6 3 c5+!

Step 3: Clearance. White's other bishop is given the chance to participate in the defence.

3...♔xc5 4 ♗f1!



Step 4: Give up the second bishop for Black's advanced g-pawn.

4...gxf1♕+

4...♗xf2+ 5 ♔xf2 gxf1♕+ 6 ♔xf1 ♔d4 7 ♔g2 is a basic theoretical draw.

5 ♔xf1 ♗h2 6 f3!

Step 5: Push to f3, after which Black's bishop is imprisoned behind its g-pawn.

6...g3

If 6...gxf3 7 ♔f2, Black's final pawn falls.

7 ♔g2

Black can't win this.

7...♔d4 8 f4!

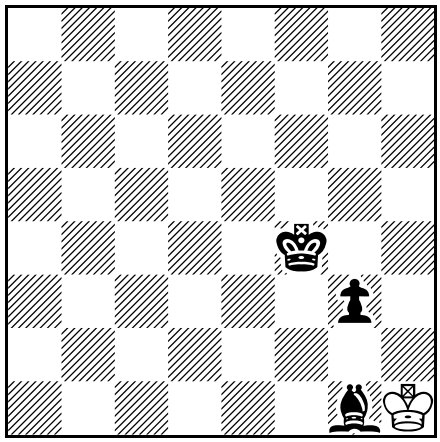
To paraphrase from *The Treasure of the Sierra Madre* movie: We don't need no stinkin' f-

pawns!

8...♔e4 9 f5 ♔xf5 10 ♔h1 ♔g4 11 ♔g2 ♔f4 12 ♔h1

Black is unable to make progress. There is one last try, which doesn't work.

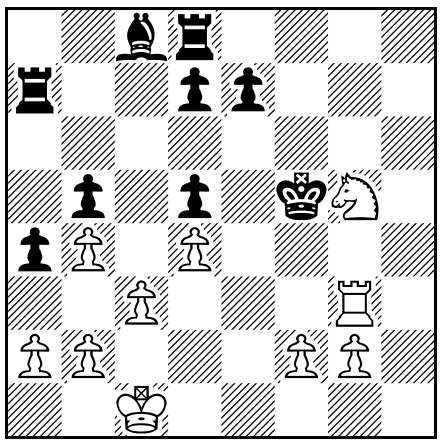
12...♗g1



13 ♔xg1 ♔f3 14 ♔f1

The king and pawn ending is drawn.

34) Froim Simkhovich
L'Italia Scacchistica 1923



White draws

This study, which doesn't even look like a study, is one of the most astounding in the entire book. Our logical mind simply rejects the truth, even in the final position.

1 ♘f7 ♖e8

1...♖f8? makes it easy for White: 2 ♖f3+ ♔g6 3 ♘e5+ ♔g7 4 ♖g3+ ♔h7 5 ♖h3+ and perpetual check.

2 ♘d6+!!

Composition principle: *Don't make the misassumption that rationality and logic will lead us to the solution.* We cannot allow this remarkable geometric incongruity to pass unexploited. Black must not be allowed to unravel with ...d7-d6. White is already a rook down and now gives away a piece for seemingly nothing. Okay, this move entombs Black's bishop forever, rendering it useless, but so what, you may ask. Black is still a rook up.

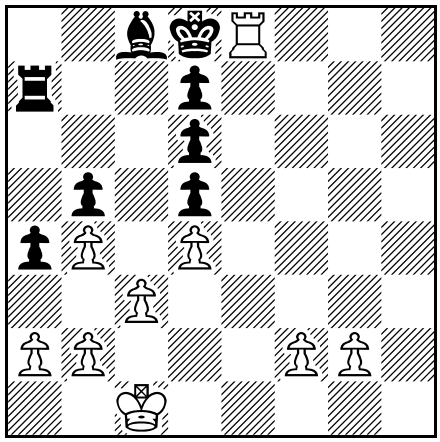
2...exd6 3 ♖f3+ ♔g6

3...♔e6 4 ♖e3+ ♔f7 transposes.

4 ♖g3+ ♔f7 5 ♖f3+ ♔e7

Black has no choice but to try and escape via d8.

6 ♖e3+ ♔d8 7 ♖xe8+!!



Yes, this position is actually a draw. I showed this study to around ten students and only one suggested swapping rooks. The rest incorrectly assumed that a rook swap would be suicidal for White.

7...♔xe8 8 a3 ♗b7

8...♔f7 9 ♔d1 comes to the same thing, since Black's only plan is to try and activate the rook.

9 ♔d1

Or 9 ♔d2.

9...♔f7 10 ♔e1

Or 10 ♔e2.

10...♖a8 11 ♔f1! ♖h8 12 ♔g1!

Oh no you don't.

12...♖e8 13 ♔f1

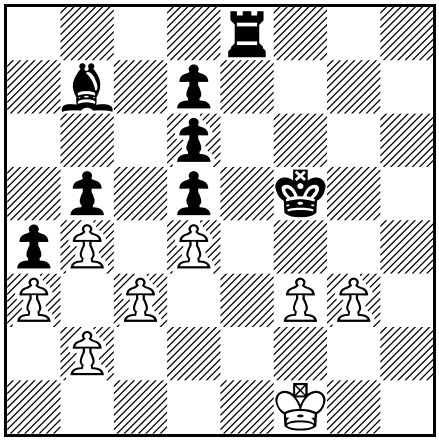
Nyet. Black's rook is denied entry via the e-file as well.

13...♔g6 14 f3!

A crucial point. White must play the kingside pawns up one rank.

14...♔f5 15 g3!

And draws.



"Is this some kind of elaborate joke," you ask? You don't believe me? Fine. Try all you like. White easily holds the draw. At first I too found it difficult to believe that a side a rook and a piece up could be held to a draw. But when we examine deeper, we see:

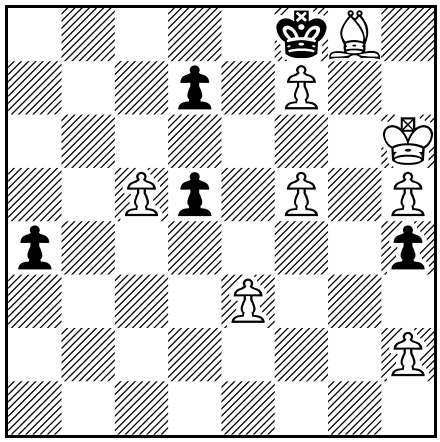
1. Black's bishop is worthless.
2. Black's rook lacks meaningful entry anywhere.
3. Black's king has no way in either.

Let's try:

a) 15...♖e3 16 ♔f2 ♖d3 17 ♔e2 ♖xf3!? 18 ♔xf3 ♗c8 19 g4+ ♔g5 20 ♔g3 ♔g6 21 ♔f4 ♗b7 22 ♔g3 ♔g5 23 ♔f3 and Black makes no progress, since the bishop is worthless. 23...♔h4? loses to the simple 24 ♔f4 ♗c6 25 ♔f5 ♗b7 26 g5 ♔h5 27 g6 ♔h6 28 ♔f6 and White promotes.

b) 15...♖g8 16 ♔f2 ♗a8 17 ♔g2 ♖xg3+!? 18 ♔xg3 ♗c6 19 f4 and Black has nothing better than to shuffle the bishop, since 19...♔e4? 20 ♔g4 is suicidal; e.g. 20...♔d3 21 f5 ♔c2 22 f6 ♔xb2 23 f7 ♔xa3 24 f8♕ ♔b2 25 ♕f2+ ♔xc3 26 ♔f4 ♔xb4 27 ♕e1+ ♔b3 28 ♕b1+ ♔c3 29 ♔e3 b4 30 ♕c1+ ♔b3 31 ♔d2 and it's mate in six moves at the most.

95) Frederick Lazard
L'Éclaireur de Nice 1928



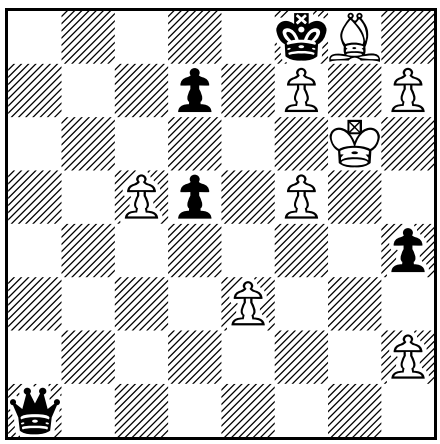
White wins

Black's surging a-pawn cannot be caught and White has too many pawn moves to successfully construct a stalemate. Yet White does indeed have a way to win. Try and work out a plan.

1 ♔g6

Step 1: Move the king to g6, in preparation for h5-h6-h7-h8♕. But isn't this futile? After all Black promotes first, with control of the long diagonal.

1...a3 2 h6 a2 3 h7 a1♕



Exercise: We have a draw if we play 4 f6, since Black must then give perpetual check. But how on earth can White actually win?

Answer: Promote to a new queen, giving it away. Then we box in and win Black's queen by means of zugzwang.

4 h8♕!!

Is this one of those horror movies, where the characters die horribly, one by one? Some ideas are so disorientingly incongruous, they fail to immediately register in our confused brain. The vast majority of my students tried 4 f6? which leads to a draw after 4...♕g1+ 5 ♔h5 ♕xh2! 6 h8♕ ♕e5+ or 6...♕e2+ etc.

4...♕xh8

If now 4...♕g1+ 5 ♔h5! ♕d1+ 6 ♔h6, Black has no more checks and White wins.

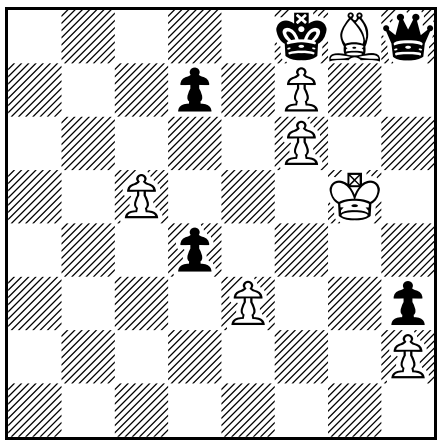
5 f6!

Black's king and queen approach a state of complete catatonia. Neither has a move and Black has no way to unravel within the claustrophobic environment.

5...h3 6 ♔g5!

Zugzwang. We cut off ...♕h4 as an escape route.

6...d4



Exercise: Work out the details of White's win.

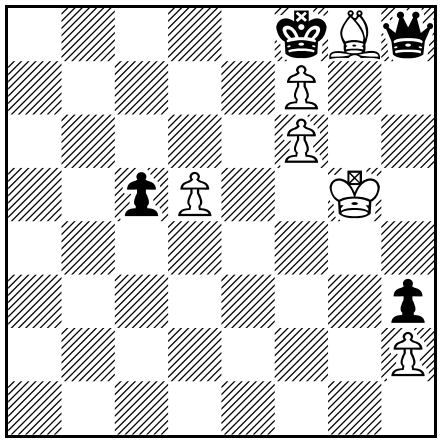
Answer: Only by pushing to c6 can White win. We must make certain that Black gets pawn moves to eliminate stalemating tricks.

7 c6!

7 exd4? blows it after 7...d5! 8 cxd6 ♕h6+! 9 ♔xh6 stalemate.

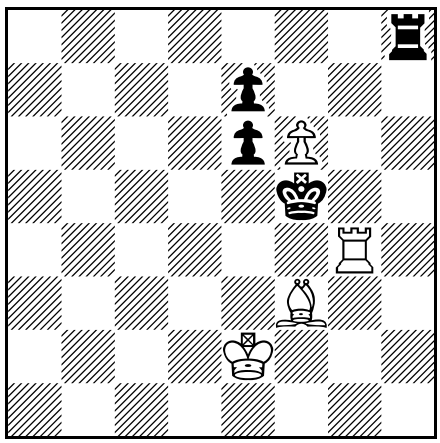
7...dxc6 8 exd4

Several of my students fell for 8 e4, intending to push the pawn to e7. The mate is an elaborate illusion: 8...d3 9 e5 d2 10 e6 ♕xg8+! (this return of the queen destroys White's would-be mating net) 11 fxg8♕+ ♔xg8, when White is too slow and Black wins.
8...c5 9 d5!



White wins by pushing the d-pawn. The thematic finish is 9...c4 10 d6 c3 11 d7 c2 12 d8♖ mate.

96) Leonid Kubbel
64 1928



White wins

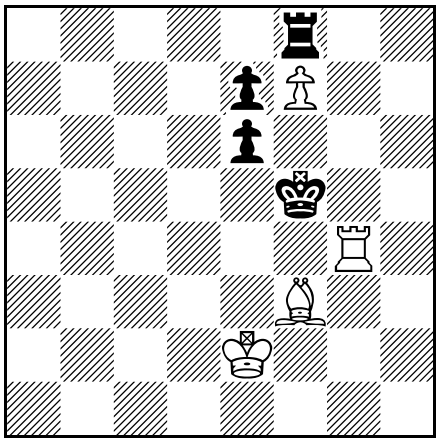
I saw that taking on e7 is a sucker's choice. So by default I knew the study began with:

1 f7!

Threat: ♖g8. After 1 fxe7? ♔f6 2 ♖h4 ♖e8 White's final pawn falls, leaving rook and bishop versus rook with a theoretical draw.

1...♖f8

If 1...♔f6 then 2 ♖f4+! (not 2 ♖g8?, which hangs the f-pawn to 2...♖h2+ 3 ♔e3 ♔xf7) 2...♔g7 3 ♗g4! e5 4 ♖f2 ♔f8 5 ♗e6 ♖h6 6 ♗a2 ♖f6 7 ♔e3 wins; e.g. 7...♔g7 8 ♖g2+ ♔h6 9 ♖g8.



Exercise: Find a way for White to retain the f7-pawn.

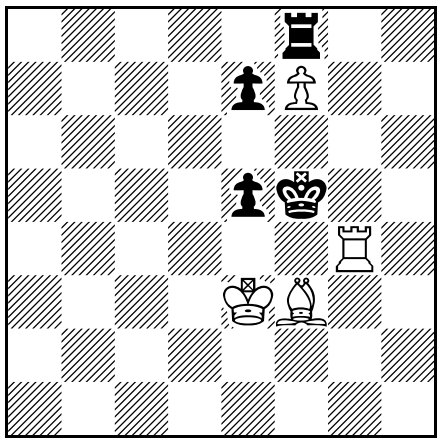
Answer: By moving our king to e3 our f-pawn is tactically protected.

2 ♔e3! e5

The best try.

a) 2...♖xf7 loses to 3 ♖f4+ ♔g6 4 ♗h5+! (attraction).

b) 2...♔f6 3 ♖f4+ ♔g7 is met this time by 4 ♗h5 ♔h6 5 ♔e4! (giving the bishop away to reach a won rook ending) 5...♔xh5 6 ♔e5 ♔g5 7 ♖f1 ♔g6 8 ♔xe6 ♔g7 9 ♖g1+ ♔h7 10 ♔xe7 etc.



Exercise: How can we profit from Black's disarray?

Answer: Step 1: Give our f-pawn away (!) to lure Black's rook to f7.

3 ♖g8!

Remember the pieces in a composed problem or study never tell the truth.

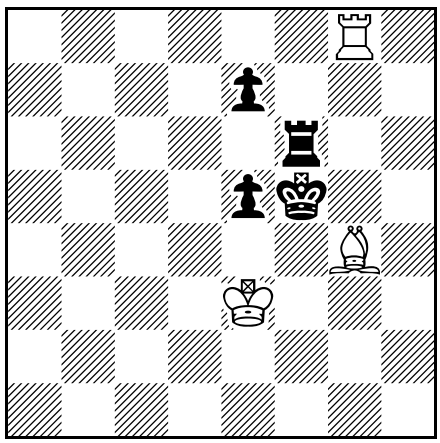
3...♖xf7 4 ♗h5!

Step 2: Trapped piece. Black's rook has no safe squares.

4...♖f6

Otherwise 4...♔e6 5 ♗xf7+ or 4...♖h7 5 ♗g6+ wins the rook.

5 ♗g4 mate



Step 3: Deliver mate with the bishop on g4. Is this a chess study or the aftermath of a terrible accident? The sub-theme came out of the blue and wasn't so easy to identify.