

DVORETSKY'S



ENDGAME MANUAL

4th
Edition

Dvoretsky's Endgame Manual

Fourth Edition

**by
Mark Dvoretsky**

Foreword by Artur Yusupov

Preface by Jacob Aagaard



2014
Russell Enterprises, Inc.
Milford, CT USA

Dvoretzky's Endgame Manual

Fourth Edition

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Mark Dvoretzky

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From the Author (First Edition)

Endgame theory is not a complicated subject to study!

All one needs is thorough knowledge of a limited number of “precise” positions (as a rule, elementary ones) plus some of the most important principles, evaluations, and standard techniques. The question is, how to select the most important material from the thousands of endings analyzed in various handbooks? That is why this book was written: it offers the basic information you need as the foundation of your own personal endgame theory.

As long ago as 1970, when I was just a young chess master and a student at Moscow University, I was unexpectedly invited to give some endgame lectures to the chess faculty of the Moscow High School for Sports. It was then that I had to think about what exactly a practical chess player must study. I defined sound methods of studying endgame theory (from the point of view of logic, rather obvious ones) and prepared examples of the most important types of endgames (pawn, rook-and-pawn endgames, and those with opposite-color bishops). I also prepared a series of lectures on the general principles of endgame play. By the way, the main ideas of that series became (with my permission) the basis of the popular book *Endgame Strategy* by Mikhail Shereshevsky (I recommend that book to my readers).

Later on, these materials, continually corrected and enlarged, were used in teaching numerous apprentices. They proved to be universal and useful for players of widely different levels: from ordinary amateurs to the world's leading grandmasters. My work with grandmasters, some of them belonging to the world's Top Ten, have convinced me that almost none of them had studied chess endings systematically. They either did not know or did not remember many important endgame positions and ideas, which can be absorbed even by those of relatively modest chess experience. As a result, even among grandmasters, grave errors occur even in elementary situations: you will find plenty of examples in this book. Some grandmasters asked me to help them, and our studies resulted usually in a substantial improvement of their tournament achievements. Two weeks of intensive study were usually more than enough to eliminate the gaps in their endgame education.

So, what will you find in this book?

Precise positions. This is our term for concrete positions – positions with a minimum number of pawns, which should be memorized and which will serve as guideposts again and again in your games.

The hardest part of preparing this book was deciding which positions to include and which to leave out. This required rejection of many examples that were intrinsically interesting and even instructive, but of little practical value. Common sense dictates that effort should be commensurate to the expected benefit. Human memory is limited, so there is no sense in filling it up with rarely-seen positions that will probably never occur in our actual games. One should study relatively few positions, the most important and most probable, but study and understand them perfectly. One should not remember long and perplexing analyses. We may never have an opportunity to reproduce them in our games, and we will certainly forget them sooner or later. Our basic theoretical knowledge must be easy to remember and comprehend. Some complicated positions are also important, but we may absorb their general evaluations and basic ideas, plus perhaps a few of their most important lines only.

The positions that I consider part of the basic endgame knowledge system are shown by diagrams and comments in blue print. If the explanatory notes are too complicated or less important the print is black; these positions are also useful but there is not much sense in committing them to memory.

Endgame ideas. These represent, of course, the most significant part of endgame theory. Study of certain endgame types can be almost fully reduced to absorbing ideas (general principles, standard methods and evaluations) rather than to memorizing precise positions.

When discussing precise positions, we will certainly point out the endgame ideas in them. But many standard ideas transcend any particular precise position. These ideas should be absorbed with the help of schemata – very simple positions where a technique or a tool works in a distilled form and our attention is not distracted by any analysis of side lines. Over the course of time we may forget the precise shape of a

schema but will still remember the technique. Another method of absorbing endgame ideas is to study practical games or compositions where the ideas have occurred in the most attractive form.

The schemata and the most instructive endgames are represented by color diagrams as well. Plus, important rules, recommendations and names of the important tools are given in *bold italics*.

As I am sure you realize, the choice of the ideas and precise positions included in this system of basic endgame knowledge is, to some extent, a subjective matter. Other authors might have made slightly different choices. Nevertheless I strongly recommend that you not ignore the blue text: it is very important. However you of course are free to examine it critically, and to enrich it with the other ideas in this book (those in black print), as well as with examples you already know, from other books or your own games.

Retention of the material. This book would have been rather thin if it included only a laconic list of positions and ideas related to the obligatory minimum of endgame knowledge. As you see, this is not so.

Firstly, the notes are definitely not laconic, after all, this is a manual, not a handbook. In a handbook, a solution of a position is all one needs; in a manual, it should be explained how one can discover the correct solution, which ideas are involved.

Secondly, in chess (as in any other sphere of human activity), a confident retention of theory cannot be accomplished solely by looking at one example: one must also get some practical training with it. For this purpose, additional examples (those with black diagrams and print) will be helpful.

You will see instructive examples where the basic theoretical knowledge you have just studied is applied in a practical situation. The connection between the theory and the practical case will not always be direct and obvious. It is not always easy to notice familiar theoretical shapes in a complicated position, and to determine which ideas should be applied in this concrete case. On the other hand, a position may resemble theory very much but some unobvious details exist; one should discover them and find how this difference influences the course of the fight and its final outcome.

Some practical endings are introduced by the “Tragicomedy” heading. These are examples of grave errors committed by various players (sometimes extremely strong ones). The point is not to laugh at them: you know that there are spots even on the sun. These cases are simply excellent warnings against ignoring endgame theory. Additionally, experience shows that these cases tend to be very well remembered by the student, and are therefore very helpful in absorbing and retaining endgame ideas.

Practical training, by which I mean solving appropriate exercises, is essential. You will find a large number and wide variety of exercises in this book, from easy to very difficult. Some solutions are given directly after the exercises, other are placed in the special chapter that concludes the book.

Some exercises do not involve a search for a single correct solution. They are designed for solving in the playing mode, when a series of contingent decisions is required. The best result can be achieved if a friend or coach assists you by referring to the book. But you can also play through the example without assistance, choosing moves for one side and taking the answering moves from the text of the book.

Of course, one need not study all these examples, nor must one solve all the exercises. But still, if you do, your knowledge of the basic theory will be more sound and reliable. Also, self-training develops one’s ability to calculate lines deeply and precisely; this skill is essential for every player.

Analyses. When working on the manuscript, in addition to the large volume of material I had collected myself, I also – quite naturally – used endgame books by other authors. Checking their analyses, I found that an amazingly high number of endings, including many widely known and used in book after book, are analyzed badly and evaluated wrongly. In those cases I went deeper than the concept of the endgame manual required. I felt I had to do it. As I wrote above, studying endgame theory is not a very labor-intensive process, but analysis of a particular endgame, or practical play under time restriction in a tournament, can be a much more sophisticated and complicated matter. Therefore, my readers will find corrected versions of many interesting endgame analyses, plus some entirely new analyses that are important for endgame theory.

Presentation of the material. The material here is presented mainly in a traditional manner, classified according to the material relationships on the board. First pawn endings are analyzed, then those with minor pieces, then rook-and-pawn, etc. But this method is not followed too strictly. For example, the queen-versus-pawns section is in chapter 1, to demonstrate immediately what can arise in some sharp pawn endings.

In the chapter on pawn endings, you will meet some terms and techniques (such as “corresponding squares,” “breakthrough,” “shouldering” etc.) that are important for many kinds of endgame. Some of these

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techniques are illustrated by additional examples with more pieces on the board; as the book continues, we may refer to these cases again.

Some chapters (for example, those on pawn and rook-and-pawn endings) are quite long while others are rather short. Chapter length does not reflect the relative importance of a kind of endgame; rather it has to do with the richness of ideas and number of precise positions required for full understanding.

The final chapter deals with the most general principles, rules and methods of endgame play, such as king's activity, zugzwang, the fortress etc. Of course, these themes appear earlier in the book, but a review of already familiar ideas improves both understanding and retention.

What this book does not contain. Obviously, one cannot embrace the infinite. I have already described how the book's material has been selected. Now about other limitations.

My own formal definition of "endgame" is: the stage of a chess game when at least one side has no more than one piece (in addition to the king). Positions with more pieces are not discussed here (except for cases when the "extra" pieces are exchanged).

Our subject is endgame theory. Some problems of chess psychology that belong to "general endgame techniques" are beyond our discussion. Interested readers may turn to the aforementioned *Endgame Strategy* by Shereshevsky, or to *Technique for the Tournament Player*, a book by this writer and Yusupov.

Special signs and symbols. The role of the blue text in this book has already been explained. Now the time has come to explain special signs and symbols.

To the left of diagrams, you will find important information. First of all, the indication of who is on move: "W" means White and "B" Black.

If a question mark is shown, the position can be used as an exercise. Most often, there is no special explanation of what is expected from the reader – he must make a correct decision on his own, because in an actual game nobody will tell you whether you should play for a draw or for a win, calculate a lot or simply make a natural move. Sometimes, however, a certain hint is included in a verbal question.

Exercises with solutions that are given separately, at the end of the book, have two sets of numbers beside the diagrams. For example, diagram 1-14, the 14th diagram of chapter 1, also has the designation the information given in the 1/1, meaning it is the first such exercise of chapter 1.

The combination "B?/Play" means that the position is designed for replaying, and that you are to take the black pieces.

Beside some black diagrams, the symbol "\$" appears. This indicates that the position and the idea behind it have theoretical value, though less compared to those from basic theory (blue diagrams).

Many years ago, the publication *Chess Informant* developed a system of symbols to describe the evaluation of a position or move. This system is widely used now and, with minimal changes, is applied in this book, too.

Finally, a work of this scope cannot be produced by a single individual. I am grateful to many others for their assistance during the many stages of producing this book. I would like to thank Artur Yusupov and Jacob Aagaard for their encouragement and eventual contributions, the Introduction and Preface respectively; Karsten Müller for his help proof-reading the text and checking the accuracy of variations; Taylor Kingston for his assistance editing the final version of the text; Jim Marfia and Valery Murakhveri for their translations of the original Russian text; Harold van der Heijden for his assistance checking sources; and Hanon Russell, the publisher, for coordinating the efforts of all concerned.

This book is an improved and expanded version of the German-language edition, and in that regard, it is also appropriate to thank Ulrich Dirr, who provided invaluable assistance in the preparation of the German edition and Jürgen Daniel, its publisher. Without their fine work, it would have been significantly more difficult to bring out this English-language edition.

Mark Dvoretzky
Moscow
September 2003

From the Author (Fourth Edition)

Readers familiar with previous editions of the *Manual* have probably noticed that the new edition is larger than the previous one. But it is not because its content has been significantly increased or is more complicated – it is not. On the contrary, I have tried to make it more accessible to study, adding about 200 new diagrams to the text. Those who read the book without a board (there are many players who are able to do this) will find it easier to follow complex examples. In addition, the new diagrams will draw your attention to many interesting and instructive moments previously buried in the text and variations.

As always with new editions, I have revised the text with clarifications and corrections which were found since the release of the previous edition. Significant revisions have been made in some aspects of the theory of rook endings. For that, I would like first and foremost to thank the analyst Vardan Pogosyan. In 2011-2012, I actively corresponded with Pogosyan, and he showed me many of the discoveries he had made, leading me to rethink some important theoretical concepts.

Relatively recently the computer database “Lomonosov” was created; it accurately evaluates seven-piece endings (previously only six-figure endings were available). Naturally, I checked the book’s seven-piece examples with the “Lomonosov” database and corrected any errors found.

Mark Dvoretzky
Moscow
September 2014

Chapter 3

Knigh Endgames

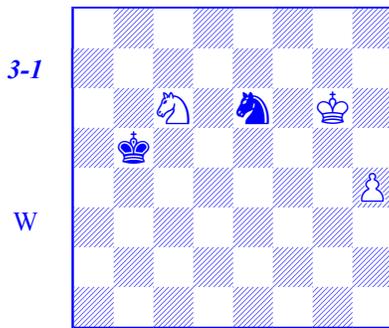
In examining the “knight versus pawns” endgame, also we learned quite a bit that is useful about knight endgames. Firstly, because the peculiarities of the knight which we learned about there (such as its “distaste” for rook pawns, or its ability to fork or win tempi by checking the enemy king), also function here. And secondly, the knight must quite often be sacrificed in order to obtain a “knight versus pawns” endgame.

The Deflecting Knight Sacrifice

We shall not be making a systematic examination of the endgame in which a knight faces a knight and pawn: its theory is quite complex, and in my view, rather chaotic. There are no principles which are operative for many positions; the evaluation and the course of the struggle depend entirely upon the concrete details.

The deflecting knight sacrifice is the almost universally employed technique in such endings. And not only in these – there are many situations in which one side tries to queen its own passed pawn or to break into the enemy's camp with his king.

Eingorn – Beliavsky
USSR ch, Kiev 1986



1 ♖d4+! ♗x♗4 2 ♜f6!+-

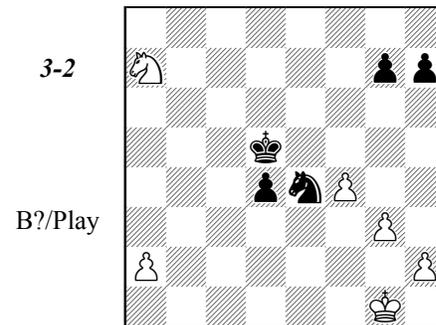
The king goes, as we taught, one square diagonally away from the knight; which renders the h-pawn unstoppable.

2...♗c2 3 h5 ♗e3 4 ♜g5! (the same idea again) **4...♗c4 5 h6** Black resigned, in view of **5...♗e5 6 h7 ♗f7+ 7 ♜f6 ♗h8 8 ♜g7.**

In the next diagram, Black may be a pawn down, but White's scattered pieces and more importantly the dangerous passed d-pawn, supported by

the excellently centralized king and knight, assure him the advantage.

Barcza – Simagin
Moscow-Budapest m tt, 1949



1...d3 2 ♜f1 ♗c3!

It is most important to deprive the white knight of the b5-square, which is precisely the square it needs to help the king battle the passed pawn, as shown by the following variations:

2...♜d4? 3 ♗b5+ ♜e3 4 ♗a3! d2 5 ♗c4+ ♜d3 6 ♗xd2!, when White draws without too much trouble, since the a-pawn will draw one of Black's pieces to the queenside;

2...♜c4? 3 a4! ♜b3 4 ♗b5 ♜xa4 5 ♗d4#.

3 ♜e1! ♜d4 4 ♜d2 (4 ♗c6+? ♜e3--)

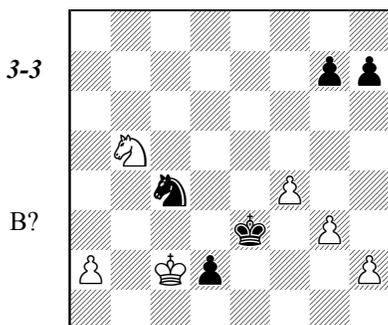
4...♗e4+ 5 ♜c1 5 ♜e1? (or 5 ♜d1?) would lose at once to **5...♜e3.** Here, that move would fall short after **6 ♗b5 d2+ 7 ♜c2 ♜e2 8 ♗d4+.**

5...♗d6!!

The knight repositions itself more favorably, all the while maintaining control over that vital b5-square. Meanwhile, White's knight has no other way to reach the pawn: **6 ♗c6+ ♜c3 7 ♗e7 (7 ♗e5 d2+ 8 ♜d1 ♗e4) 7...d2+ 8 ♜d1 ♗e4 9 ♗d5+ ♜c4!+-.**

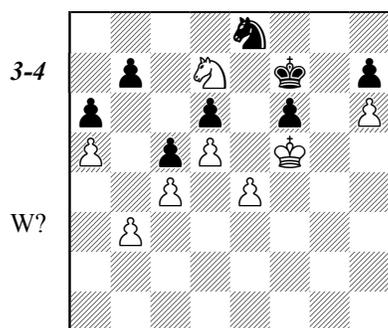
6 ♜d2 ♗c4+ 7 ♜c1 d2+ 8 ♜c2 ♜e3 9 ♗b5 (9 ♗c6 ♗b2--)

Knight Endgames



9...♞a3+!
And in conclusion – a deflecting knight sacrifice
(10 ♞xa3 ♚e2). White resigned.

Hernandez – Sula
Saloniki ol 1984

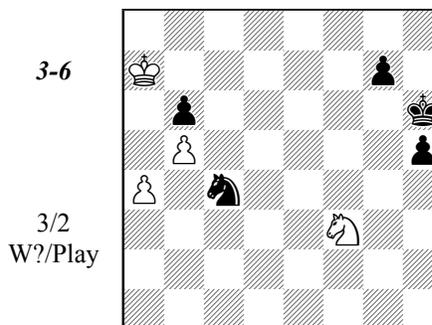
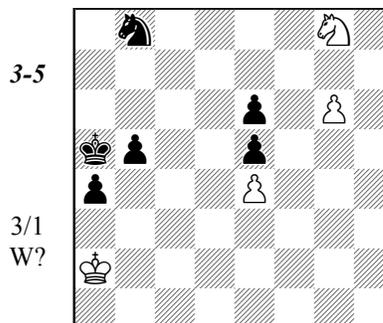


1 ♞f8! ♚xf8 2 ♚e6

This knight sacrifice has allowed the king to invade the enemy camp. Black is in zugzwang: on 2...♚g8, 3 ♚e7 decides.

2...♞g7+ 3 ♞g7 ♚xg7 4 ♚xd6 ♞h5 5 ♚e7 ♞h4 6 ♞d6 ♞h3 7 ♞d7 ♞h2 8 ♞d8 ♚h1 9 ♚f8+ ♚h7 10 ♚f7+ ♚h8 11 ♚xf6+ ♚h7 and Black resigned.

Exercises



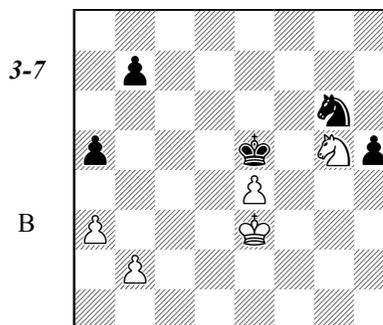
Botvinnik's Formula

“Knight endgames are pawn endgames”: that is something Botvinnik once said. What he had in mind, is that many of the laws of pawn endings apply equally to knight endings. The same high value is given, for instance, to the active position of the king or the outside passed pawn. Such techniques as the pawn breakthrough, shouldering, the various methods of playing for zugzwang, and so forth, are seen constantly, not just in pawn endgames, but also in knight endgames. And we shall be convinced of this after studying a few practical examples.

Let's begin with a classic endgame.

In the diagram, the pawn endgame would be an easy win for Black, in view of the outside passed h-pawn. In the knight endgame, he has considerably more complex problems to solve.

Lasker – Nimzovitch
Zürich 1934



1...♚f6

A high degree of accuracy is required. The overhasty 1...h4? would allow the white knight to

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attack the queenside pawns by 2 ♖f7+ ♜f6 3 ♜d6 b6 4 ♜c4 h3 5 ♜f2!

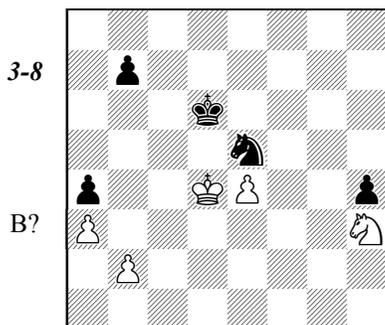
2 ♜h7+ ♜g7 3 ♜g5 ♜f6 4 ♜h7+ ♜e7!

The king retreats, but only briefly; now the e5-square can be occupied by the knight. On 5 ♜d4? Black forces a won pawn endgame by 5...♜f8! 6 ♜g5 ♜e6+!

5 ♜g5 ♜e5 6 ♜d4

6 b3!? was worth considering, in order to prevent Black from fixing the queenside pawns by ...a5-a4, and retaining the option of moving the king either to d4 or to f4.

6...♜d6 7 ♜h3 a4 8 ♜f4 h4 9 ♜h3

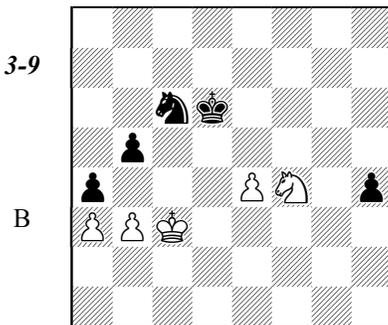


9...b6!

“Steinitz’s Rule” in action! Nimzovitch intends ...b7-b5 and ...♜c6+; however, the check would have been better delivered with the white knight on h3, as may be seen from the variation 9...b5 10 ♜f4 ♜c6+ 11 ♜c3!, when Black cannot play 11...♜e5 in view of 12 ♜g6+. By making use of the choice of either the one-square or two-square move for this pawn, Black solves the problem – though it is true he had some help from his opponent.

10 ♜f4 b5 11 ♜h3?

The knight should not have left the f4-square, where it prevents the move ♜e5. White’s best defense was 11 ♜c3! In reply, the deflecting knight sacrifice 11...♜g6?! 12 ♜xg6 h3 fails to 13 ♜h4! h2 14 ♜f5+ ♜e5 15 ♜g3 ♜f4 16 ♜h1 ♜x4 17 ♜d2=. If 11...♜c6, then White can either wait with 12 ♜d3(d2), or exchange a pair of queenside pawns with 12 b3.



12...b4+!? is tempting and it will win in the line 13 ab? a3 14 b5 ♜b4 15 e5+ ♜x5 16 ♜g6+ ♜e4 17 ♜xh4 ♜d3! However, White would answer 13 ♜b2!, for example: 13...ba+ (13...ab 14 ab) 14 ♜x3 ab 15 ♜xb3 ♜e7 (otherwise, Black cannot play ♜e5) 16 ♜c3 ♜e5 17 ♜h3 ♜x4 18 ♜d2 ♜f3 19 ♜e1=.

Black could fight on with 11...♜c5!? 12 ♜e6+ ♜b6 13 ♜f4 ♜g6! 14 ♜h3 ♜c5. However, I am not sure that Black’s positional advantage is sufficient for victory here.

11...♜c6+!

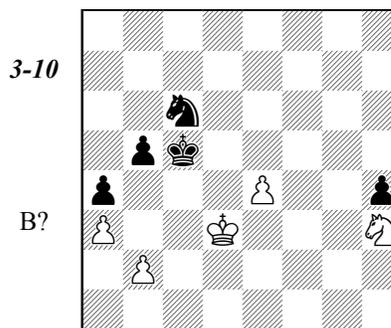
The straightforward attempt 11...♜c4 12 ♜c3 ♜e5 is erroneous in view of 13 b3! ab (13...♜x3 14 ♜b2 ♜c4+ 15 bc bc 16 ♜c3 a3 17 ♜f2 ♜f4 18 ♜c2=) 16 ♜xb3 ♜x4 17 ♜b4 Δ 18 a4= (Müller/Lamprecht).

12 ♜e3

Emanuel Lasker probably rejected 12 ♜c3!?, because of 12...♜e5 13 ♜d3 ♜a5. Let’s look at what could happen: 14 ♜g1! ♜f4 15 e5 ♜c6! 16 e6 ♜f5 17 ♜c3(e3), and the pawn is invulnerable: 17...♜x6? 18 ♜f3 h3 19 ♜g5+. However after 17 ♜c3 ♜f6! White is in zugzwang (18 ♜d3 ♜d8 or 18 b3 ab 19 ♜xb3 ♜d4+). 17 ♜e3 loses, too: 17...♜f6! 18 ♜e4 ♜d8 19 ♜d5 ♜x6 20 ♜c6 ♜f5 21 ♜xb5 ♜g4 22 ♜xa4 ♜g3 (Müller/Lamprecht).

12...♜c5 13 ♜d3

On 13 ♜f4, Black has the strong 13...♜c4, or the equally strong 13...♜d4 Δ 14...♜e5. Here, we see yet another technique borrowed from the arsenal of pawn endgames: widening the beachhead.



13...b4! 14 ab+

If 14 ♜f4, then 14...♜e5+ 15 ♜c2 ba 16 ba ♜d4.

14...♜xb4 15 ♜c2 ♜d4+!

Nimzovitch displays outstanding technique. The point of widening the beachhead is to clear the king’s path to the opposite wing; but the grandmaster is in no hurry to execute this plan. First, it is useful to reposition the knight to e6, where it hobbles the enemy knight. The consequences of the variation 15...♜c4 16 ♜g5 ♜e5 (16...♜d4? 17 ♜f3+) 17 ♜h3

Knight Endgames

♖d4 18 b3 ab+ (18...a3 19 ♖b1) 19 ♖×b3 ♜×e4 20 ♜c2 are certainly not clear (even though this position, objectively, should be won).

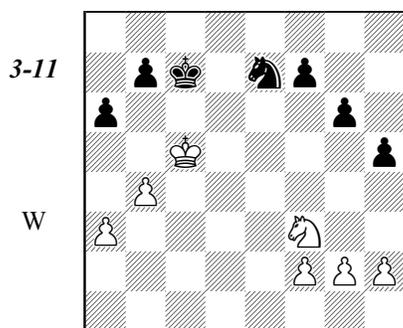
16 ♖b1

16 ♜d3 ♗e6 17 ♜e3 ♖b3 is absolutely hopeless.

16...♗e6 17 ♖a2 (17 ♜c2 ♜c4○) **17...♖c4 18 ♖a3 ♖d4 19 ♖×a4 ♖×e4 20 b4 ♖f3 21 b5 ♖g2** White resigned.

On 22 b6, there follows 22...♜×h3 23 b7 (23 ♖b5 ♗d8) 23...♗c5+. Nimzovitch evidently calculated this whole variation when he played 15...♗d4+!

Botvinnik – Kholmov
Moscow ch tt 1969



White's king is considerably more active than his opponent's, and that factor defines his great, and probably winning, advantage.

1 ♗g5!

It is important to induce Black's pawns to advance, as then they will be easier to attack.

1...f6 2 ♗h7 f5 3 h4

After 3...b6+ 4 ♜d4 ♜d6 5 ♗f8 ♗c6+ 6 ♖e3 ♗e5 7 ♖f4, the g6-pawn is lost. If White had played 3 f4? (instead of 3 h4), the king would not have had the f4-square, and Black would hold (by 6...♗e7).

3...f4

Waiting tactics must eventually result in zugzwang for Black, so he lashes out in a desperate attempt at counterattack on the kingside.

4 ♗f8 b6+

In Botvinnik's opinion, there were more practical chances after 4...f3!? 5 g3 (5 gf? b6+ 6 ♜d4 ♗f5+ 7 ♖e5 ♗×h4∞) 5...♗f5 6 ♗×g6 ♗×g3, although Black's position remains difficult after 7 ♜d4.

5 ♜d4 ♗f5+ 6 ♖e4 ♗×h4

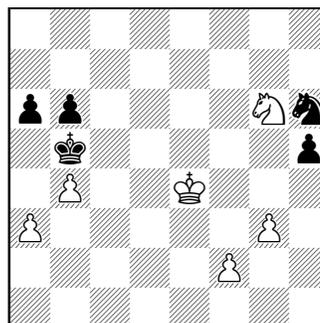
6...f3 would not have helped, in view of 7 ♖×f3 ♗×h4+ 8 ♖g3 ♗f5+ (8...g5 9 ♗e6+) 9 ♖f4.

7 ♗e6+ ♖c6 8 ♗×f4 ♖b5

On 8...g5, White replies 9 g3! gf 10 gh+-.

9 g3 ♗f5 10 ♗×g6 ♗h6

3-12



W

Now it is time to use the technique of defending the pawn with the knight that we learned in the "Knight vs. Pawns" chapter.

11 ♗e5! ♖a4 12 ♗c4 ♖b3

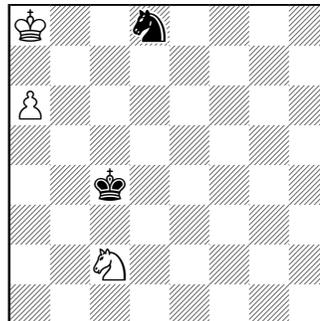
After 12...b5 13 ♗e5 ♜×a3 14 ♗c6!, the knight defends the pawn and prevents ...a6-a5. If 12...♖b5, then 13 ♗b2+- (barrier).

13 ♗×b6 ♖×a3 14 ♗d5 ♖b3 15 f4 ♖c4 16 ♗c7 ♖×b4 17 ♗×a6+ Black resigned.

The following is an example of zugzwang.

R. Réti, 1929

3-13



§

W?

On 1 ♖b8? ♖b5! (1...♗c6+? 2 ♖b7 ♜c5 3 ♗d4! or 3 ♗b4! – a standard deflecting knight sacrifice) 2 ♗b4 ♗c6+ 3 ♖b7, Black forces the draw with 3...♗a5+! 4 ♜c7 ♗c6.

Before moving his king to b8, White must lose a move so as to force the enemy king, through zugzwang, to occupy the a5-square.

1 ♖a7! ♖b5

Black loses immediately with 1...♜c5 2 ♗d4! (zugzwang – but not 2 ♗b4? ♖b5 3 ♖b8 ♗c6+, with the drawing position we know already) 2...♜×d4 3 ♖b6+-.

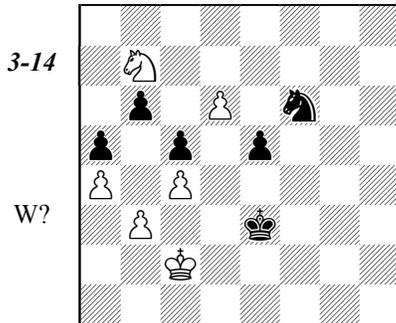
2 ♗b4○ ♖a5

Dvoretsky's Endgame Manual

The goal is achieved! Black's king stands badly here – it deprives the knight of this square, and also fails to control c6.

3 ♖b8! ♗c6+ 4 ♜b7 (4 ♜c7?? ♗xb4 5 a7 ♗d5+) **4...♗d8+ 5 ♜c7 ♗e6+ 6 ♜b8(c6)+-**.

Alburt – Lerner
Kiev 1978



Although Black might appear to be better, thanks to his more active king, White's spectacular pawn break completely changes the picture.

1 ♗xc5!! bc 2 b4 ab

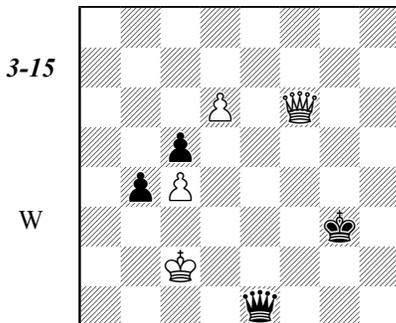
Let's examine the other possibilities:

(1) 2...cb 3 c5 b3+ 4 ♜b2 (or 4 ♜xb3 ♗e4 5 ♜c4);

(2) 2...e4 3 bc ♜f2 4 c6 e3 5 d7 e2 6 d8♖;

(3) 2...♗d7 3 ba ♜f2 4 a6 e4 5 a7 e3 6 a8♖ e2 7 ♖e4 e1♖ 8 ♖xe1+ ♜xe1 9 a5.

3 a5 e4 4 a6 ♜f2 5 a7 e3 6 a8♖ e2 7 ♖f8 e1♖ 8 ♖xf6+ ♜g3



The queen ending is a win. White only has to get his queen to the d-file, where it will safeguard the king against checks and support the advance of his passed pawn.

9 ♖g5+ ♜h3

9...♜f3 10 ♖d5+ ♜g3 11 ♖d3+ ♜h4 12 d7+-.

10 ♖d2! ♖a1

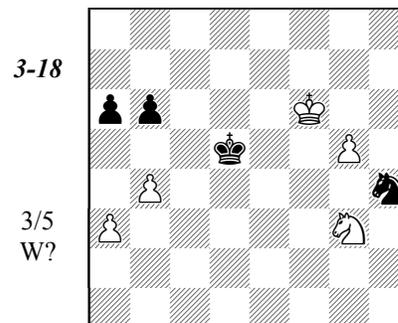
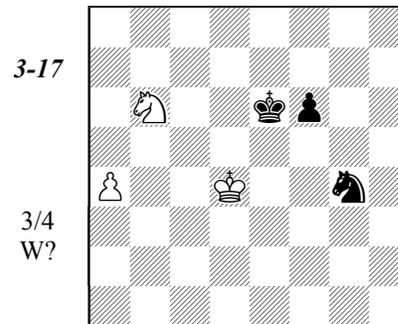
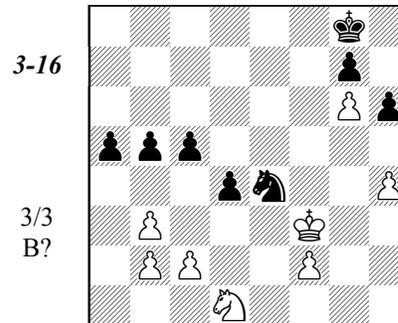
10...♖e4+ 11 ♖d3+; 10...b3+ 11 ♜c3 ♖a1+ 12 ♜xb3 ♖b1+ 13 ♖a4+-.

11 d7 ♖a4+ 12 ♜b1 ♖b3+ 13 ♜c1 ♖a3+ (13...♖xc4+ 14 ♜b2) 14 ♗d1 ♖b3+ 15 ♖e2 ♜g4!

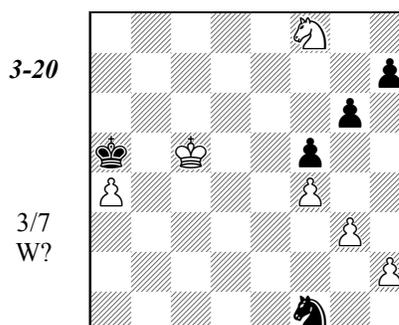
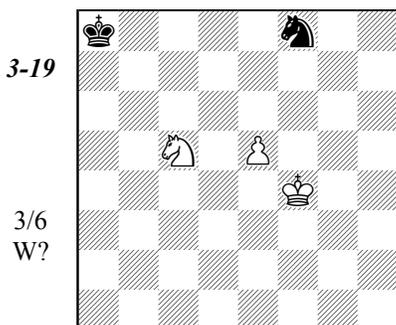
The final trap: on 16 d8♖??, Black has a perpetual: 16...♖f3+ 17 ♜e1 ♖h1+ 18 ♜f2 ♖h2+ 19 ♜e3 ♖f4+ 20 ♜d3 ♖f5+. White replies with a typical trick for queen endgames: he utilizes the enemy king position to meet Black's check with a check of his own.

16 ♖d1! ♖xc4+ 17 ♖e3+ Black resigned.

Exercises



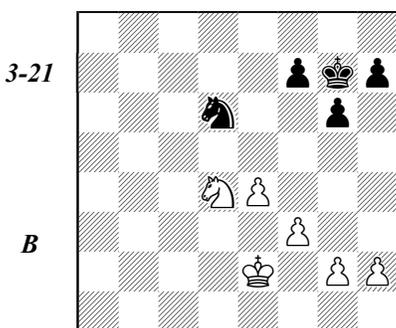
Knight Endgames



Pawns on the Same Side

Is it possible to convert an extra pawn, if all the pawns are on the same side? Practice in such positions has shown, that with the exception of pawn endgames, a player's chances of success are greatest in knight endgames. For example, *the "four vs. three" position is considered a win.*

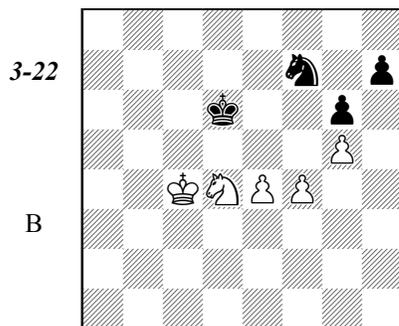
R. Fine, 1941



1...♖f6 2 g3 ♗e5 3 ♘c6+ ♗e6 4 ♗e3 f5

A reasonable plan, in principle: Black tries to trade off as many pawns as possible. Fine also examines other defensive plans:

4...♗d7 5 ♘d4 f6 6 f4 ♗e7 7 h4 (White strengthens his position to the maximum by advancing his kingside pawns) 7...♘f7 8 g4 ♗d7 9 ♗d3 ♗e7 10 ♗c4 ♗d6 11 g5! fg 12 hg



12...h6 (otherwise, Black will soon run out of moves: 12...♗e7 13 e5 ♘d8 14 ♗d5 ♘f7 15 ♘c6+ ♗e8 16 e6 ♘h8 17 ♗e5 ♗f8 18 ♗f6+-) 13 e5+ ♗e7 14 gh ♘xh6 15 ♗d5 ♘g4 16 ♘c6+ ♗e8 (16...♗d7 17 e6+ ♗e8 18 ♗d6 ♘f6 19 ♘b4 ♘e4+ 20 ♗e5 ♘f2 21 ♘d5 ♘g4+ 22 ♗d6+-) 17 ♗e6 ♘e3 19 ♘b4 ♘g2 19 ♘d5, followed by 20 ♗f6+-.

4...g5 5 ♘d4+ ♗f6 6 f4! gf+ 7 gf ♘c4+ 8 ♗f2 (8 ♗f3 ♘d2+) 8...♗g7 9 e5 ♗g6 10 ♗e2 ♘b2 11 ♗f3 ♘c4 12 ♗e4 ♘d2+ 13 ♗d5 ♘f1 14 f5+ ♗g5 15 e6! fe+ 16 ♗xe6 ♘xh2 17 f6+-.