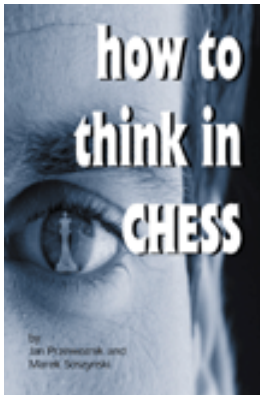




C O L U M N I S T S

The Instructor

Mark Dvoretsky



Discoveries in Minor-piece Endgames

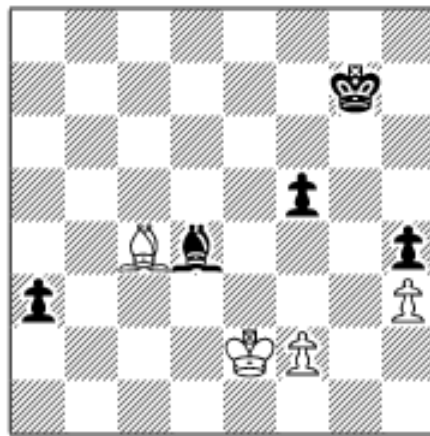
I recently finished work on an endgames textbook, which I hope will help chessplayers of every level - from grandmaster to amateur - quickly and easily acquire and reinforce the endgame knowledge they need.

During this work, I discovered a surprising number of endgames - several well-known examples among them - handed down from one book to the next, which have been poorly analyzed and incorrectly evaluated. Some of the annotators' errors were banal, or simply analytical - and thus, not very interesting. But at times, after diving into the secret recesses of a position, new conclusions emerge which are both instructive and beautiful. And it is with a few of these latter cases that I should like to acquaint my readers.

Analysts generally present their findings and supporting variations. But this is not enough for the trainer - in order to extract the maximum value from the endgames I will be presenting, we shall limit ourselves to those important endgame ideas and techniques that were employed, or should have been employed, in those examples.

Opposite-colored bishop endgames are one of my "hobbies". Many years ago, I did a great deal of work on the theory, which would allow one to deal effectively and securely with most such endgames (you may find this theory in Dvoretsky and Yusupov's *Technique for the Tournament Player*, and also in my first book, *Secrets of Chess Training* - a new edition of which, by the way, considerably enhanced and enlarged, and bearing a new title, will soon be issued by the publisher Olms Verlag). And here too, I begin with an "opposite-colored bishops" example.

Tringov - Smyslov Reykjavik 1974



White must get the pawn off the f2-square - but to where?

In the game, White chose 56. f4? Bg1! 57. Kd3 Bh2 58. Ke3 Kf6.

Black ties White down to the f4-pawn's defense, and now brings his king to b2: a simple plan, against which White has no defense. (Black put the bishop on h2, not c7, by the way, so as not to block it with his own king, even for one move - which would

happen when the king passes through d6.)

59. Ba2 Ke7 60. Bg8 Kd6 61. Bf7 Kc5 62. Ba2 (62. Be6 Kb4 63. Kd3 Bxf4 64. Kc2 Be5! 65. Bxf5 a2-+) 62...Kb4 63. Kd4 Bxf4 64. Kd5 Bg3 65. Kd4



f4, and White resigned.

In both Minev's *Encyclopedia of Chess Endings* and Smyslov's own endgame collection, this result is considered proper, and White's position, lost. But this is not true. Let's use my theory of opposite-colored bishops in an effort to find a saving line.

Black has a passed pawn, which is blocked by the bishop. In such situations, the stronger side's plan must always be to march his king over to the passed pawn (sometimes after a diversionary attack on the opposite wing, which is not needed here). White's king is tied down to the kingside, and thus cannot hinder the enemy king's march.

The fundamental, and safest, method of defense here is to blockade the enemy passed pawn with the king, while the bishop defends its own pawns. This is the standard setup to aim for. But with the pawn at f4 (or f2), there is no way for the king to reach the queenside.

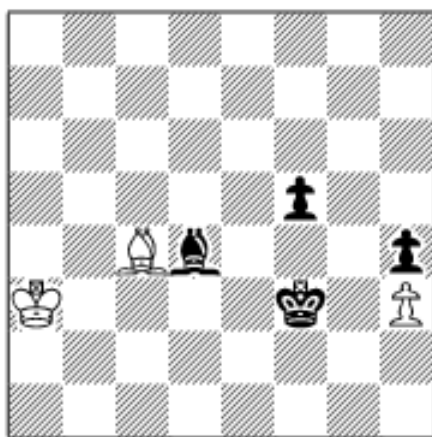
When defending an opposite-bishops endgame, you must put your pawns on squares of the same color as your bishop. Therefore, the obvious move is **56. f3!**, and then attempting to reach a basic defensive position. With the king at b3, the bishop easily defends the kingside pawns (...Kf4 is met by Be6!; and if ..f5-f4, then the bishop goes to g4). The only question is whether White will have the time to set up this formation.

56...Kf6 57. Kd3 Ke5!

First we must make sure that we can't win the bishop: 58. f4+? Kxf4 59. Kxd4 Kg3 60. Ke3 f4+ 61. Ke2 f3+ 62. Kf1 Kxh3 63. Kf2 Kg4+.

Calculating the consequences of 58. Kc2 Kf4 isn't quite so easy. Smyslov gives only the line 59. Be6 Kxf3 60. Kb3 (obviously, not 60. Bxf5 a2) 60...f4 61. Kxa3 Kg3, and wins.

But the bishop move to e6 is a loss of tempo. The line we should examine is the immediate 59. Kb3 Kxf3 (59...Bc5? 60. Be6=) 60. Kxa3.



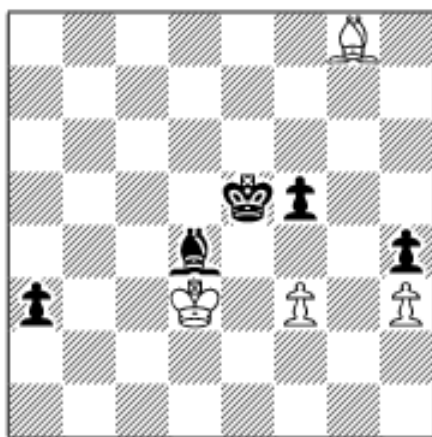
Now, after the obvious 60...f4?, the White king reaches the kingside in time: 61. Kb3 Kg3 62. Kc2 f3 (62...Kxh3 63. Kd3 intending Bd5, Ke2=) 63. Kd3 Kxh3 (63...Bb6 64. Bd5; 63...f2 64 Kxd4) 64. Kxd4 Kg3 (64...Kg2 65. Bd5) 65. Ke3 f2 (65...h3 66. Bd5 f2 67. Ke2=) 66. Bf1=.

But if Black uses a "shoulder block" (a technique most often seen in pawn and rook vs. pawn endings), he wins: 60...Ke3!! 61. Kb3 Kd2! 62. Bd5 (62. Be6 f4 63. Bg4 Ke3 64. Kc2 f3 65. Kd1 Kf2 66. Be6

Kg1+)) 62...f4 63. Bc6 Bb6 64. Bd5 Ke2! (intending f3-f2) 65. Bc4+ Kf2 66. Kc2 f3 67. Kd1 (67. Bd5 Ke2) 67...Kg1, and wins.

And yet, the position is drawn! White must play a waiting move, such as **58. Bg8!**, and Black is in zugzwang - an extremely rare case of the stronger side

being in zugzwang in a sharp endgame.

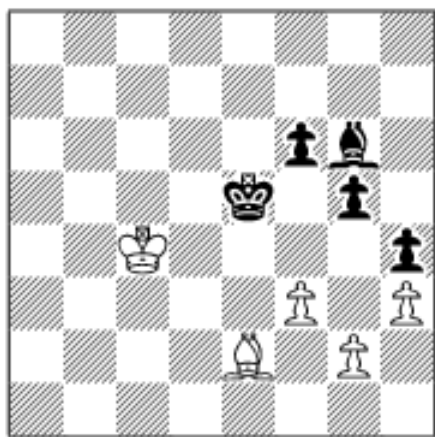


On any bishop move away from d4, White can reach the basic defensive position: 59. Kc2 Kf4 60. Be6! Kxf3 61. Bxf5, and 61...a2 is no longer dangerous. And if **58...Kf4!? 59. Kxd4 Kxf3**, the king stands worse at f3 than he did at g3 (in the 58. f4+? variation); allowing White to save himself: **60. Bd5+! Kg3 61. Ke3 f4+** (61...Kxh3 62. Kf3 locks the king onto the h-file) **62. Ke2 f3+ 63. Kf1! Kxh3 64. Kf2 Kg4 65. Bxf3+**.

Note that Minev was close to the solution - his variation runs 58. Ba2 Bg1 59. Kc3 Kf4 60. Bd5 Kg3 61. Kb3 f4-+. Of course, White draws after 60. Be6!, not 60. Bd5? "*Targeting pawns*" (with the bishop) is an important defensive technique in opposite-colored bishop endings.

At a school for young Russian talent which I recently conducted not far from Moscow, my students offered a different defensive setup for White: 56. Kf3 Kf6 57. Ba2 Ke5 58. Bg8 Bc5 59. Ba2. The king cannot go to d4 yet, because of 60. Kf4; therefore 59...Bf8 is necessary, intending 60...Bh6, and then 61...Kd4. White continues 60. Ke3! Bh6+ 61. Kd3, shutting out the Black king. But after 61...Kf4 (threatening 62...Kf3) 62. Bd5 Bf8 (the bishop wants to hit the pawn at f2 from the c5 square) 63. Kc2 Bc5 64. Kb3 Bxf2 65. Kxa3, Black wins with the familiar "shoulder block": 65...Ke3!! 66. Kb3 Kd2!

Our next example features same-colored bishops.



Teichmann - Marshall San Sebastian 1911
(Black to move)

Black has an overwhelming positional advantage, based on two factors:

(1) **Active king**: his king stands much better, able to attack the enemy pawns at will;

(2) **"Bad bishop"**: White's pawns are on the same color squares as their bishop, which is the kind of bishop we call "bad". Just in case (although I am sure that most of my

readers know what I'm talking about), I will explain precisely why having a bad bishop is a bad thing:

First of all, pawns stuck on the same color square as the bishop reduce its range;

Secondly, the bad bishop cannot attack the enemy's pawns (which are usually located on the opposite-colored squares), which consigns it to passive defense of its own pawns;

and third: pawns and bishop control only squares of one color, leaving the

"holes" between them subject to occupation by enemy pieces.

Nevertheless, this endgame is much more complex than it would at first appear. The players made mistakes; so did the commentators - among them GM Averbakh, whose analysis I shall now employ.

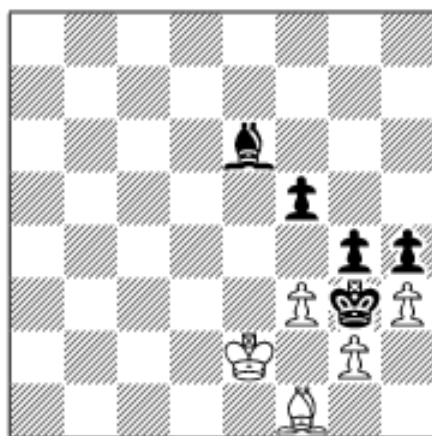
65...Bf7+?

A mistake, allowing the king to return to the defense of the kingside via d3. Now the position is drawn.

66. Kd3! Kf4 67. Bf1 Kg3 68. Ke3 Bd5 69. Ke2 f5 70. Ke3 Be6

The bishop sacrifice is insufficient: 70...f4+ 71. Ke2 Bb7 72. Ke1 Bxf3 73. gf Kxf3 74. Be2+ Kg2 (74...Kg3 75. Bg4 Kg2 76. Ke2) 75. Bf1+ Kg3 76. Ke2=. The only remaining try is g5-g4, but this trades off too many pawns.

71. Ke2 g4



72. hg

Averbakh recommends 72. fg fg 73. Ke3. An obvious draw results from 73...gh 74. gh Bd7 75. Ke2 Bb5+ 76. Ke1 Bc6 77. Ke2=. And 73...Bd7 is met by 74. hg! (but not 74. Ke2? Bb5+! 75. Ke1 Bc6 76. hg Bxg2 77. Bxg2 Kxg2, when the h-pawn queens with check) 74...Bxg4 75. Bb5! (found by Chéron), giving up the g-pawn immediately, but activating the bishop. For example, 75...Be6 76. Bc6 Bc4 77. Be4 Bf1 78. Bd5 Bxg2 79. Be6= (the interference try leads to a drawn pawn ending), or 75...Kxg2 76. Kf4! (76. Bc6+? Kg3 intending h3-h2 and Bh3-g2) 76...Be6 77. Bc6+ Kf2 (after 77...Kh2 78. Bb7 h3 79. Be4 Kg1 80. Kg3 h2, the interference at g2 is not possible) 78. Bd5! Bd7 (78...Bxd5 79. Kg4) 79. Bc6! Bh3 80. Bd5 Bg2 81. Be6=.

Averbakh considers the text move the decisive error; but here he is wrong.

72...fg 73. Ke3?

Necessary was 73. fg! Bxg4+ 74. Ke1! (Averbakh only looked at 74. Ke3 Bd7+). What we have here is a curious position of mutual zugzwang. White to move loses: 75. Bb5 Kxg2 76. Bc6+ Kg1. But it is Black to move, and after 74...Bd7 (74...Bh5 75. Bb5 Kxg2 76. Bd7, or 76. Bc6+ first) 75. Ba6 Kxg2 (75...Bc6 76. Bc8 Bxg2 77. Bd7=) 76. Bb7+ Kg1, White gets his king to g3: 77. Ke2! h3 78. Kf3 h2 79. Kg3=.

73...Bd7?

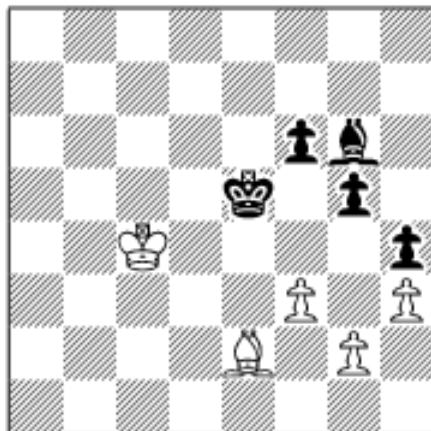
Returning the blunder, Black allows his opponent to force a draw by means of the technique pointed out in the note to move 72. The winning line was 73...gf! 74. gf Bd7 (zugzwang) 75. Ke2 (or 75. f4 Bg4! - zugzwang - 76. Ke4 Kf2+) 75...Bb5+ 76. Ke1 Bc6 77. f4 Be4! (77...Bg2? 78. f5 h3 79. f6) 78. Ke2

Bf5! 79. Ke1 Bg4 - zugzwang.

74. fg! Bxg4 75. Ke4??

The loser is the one who made the last mistake! As we have already seen, 75. Bb5! leads to the draw. With the bishop on f1, White is defenseless.

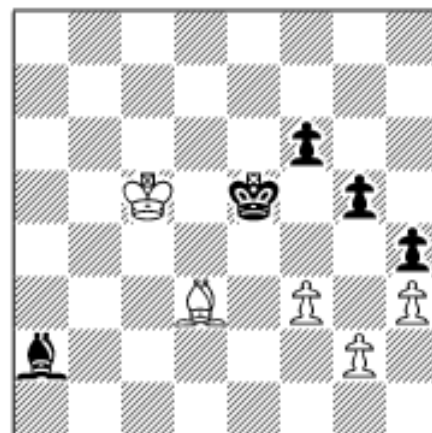
75...Bc8 76. Ke3 Bd7! (zugzwang) White resigned.



Let's return to the starting position of this endgame. Averbakh recommends 65...Bb1!

On 66. Bf1, Kf4 decides, e.g.: 67. Kd4 f5! (zugzwang) 68. Kd5 Ke3 69. Ke6 Kf2 70. Bc4 Kxg2; or 67. Kd5 Kg3 68. Ke6 f5 69. Kf6 Kf2 70. Bc4 Kxg2 71. Kxg5 Kxh3 72. f4 Kg3-+.

White would have greater practical chances with 66. Bd3!? Ba2+! 67. Kc5



Averbakh gives only 67...Kf4 68. Kd4 Kg3-+. But I think 67...Kf4? is a poor move, because of 68.

Kd6!

a) 68...Kg3 69. Ke7 Kxg2 (69...f5 70. Kf6!) 70. Kxf6 Kxf3 71. Kxg5 Kg3 72. Kf5! (72. Bf5? Bc4, followed by Bf1xh3) 72...Bd5 (72...Kxh3 73. Kf4=) 73. Bf1! (73. Be4? Bc4 is bad, as is 73. Ke5? Bg2 74. Kd4 Bxh3 75. Ke3 Bc8 76. Bf1 Bb7) 73...Bc6 74. Ke5 Bd7 75. Ke4 Kf2 76. Kf4 Be6 77. Bb5 Bxh3 78. Bc6 (reaching a position from Chéron's line) 78...Bc8 79. Bb7! Be6 80. Bd5!, etc.

b) 68...f5 69. Ke7 Bd5 70. Bf1! (70. Kf6? is a mistake: 70...g4 71. fg fg 72. hg Bxg2 73. g5 h3 74. g6 h2 75. g7 Bd5-+) 70...g4 (70...Ke5 71. Kd7 is not dangerous either) 71. fg fg 72. hg Kxg4 73. Kf6 Be4 (73...Kg3 74. Kg5 Bc6 75. Kh5=) 74. Ke5! Ba8 75. Kf6 Bb7 76. Kg6 Be4+ 77. Kh6! (= (but not 77. Kf6? Kf4! - zugzwang).

Black's king stands excellently at e5, shouldering away its White counterpart. Before attacking the pawn at g2, Black needs to strengthen his position.

Simplest would be 67...f5!, e.g.: 68. Kc6 g4! 69. fg fg 70. hg Bd5+ 71. Kc5 Bxg2 72. g5 h3 73. g6 Kf6!; or 68. Bf1 Kf4 69. Kd6 (69. Kd4 Bb1! is zugzwang) 69...Kg3 70. Ke5 Bb1 71. Kf6 Kf2 72. Bc4 Kxg2 73. Kxg5

Kxh3-+.

Another winning line is 67...Be6! 68. Ba6 f5 69. Bf1 Bc8!?!; or 69...Bd5!?! 70. Be2 Bb7 71. Bf1 Kf4 72. Kd4 Bc8! (zugzwang)-+. But the hasty 69...g4? lets slip the win: 70. fg fg 71. hg Bxg4 72. Ba6! (72. Kc4? Bc8! 73. Kc3 Kf4 74. Kd2 Kg3 75. Ke3 Bd7!-+ or 75. Ke1 Bg4!-+ lead to zugzwangs we already know about) 72...Be6 (72...Bf5 80. Kc4) 73. Bb7! Bf5 74. Kc4 Be4 75. Bc8=.

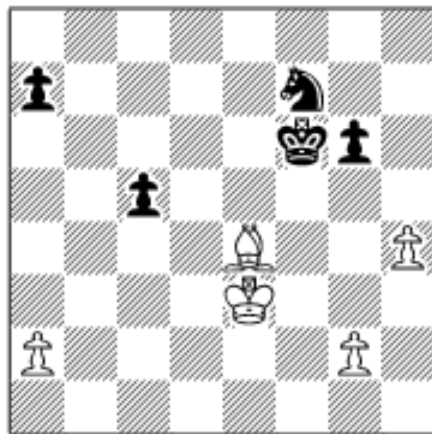
What useful lessons can we extract from this rather complicated analysis (besides the principles enunciated at the very beginning)?

Interference and Deflection - these are techniques which appeared in many variations. They tend to occur frequently in endings with same-colored bishops.

Zugzwang - played a part in the evaluation of one of the principal variations of this endgame (and it was also at the root of the analysis of the preceding example). According to Emanuel Lasker, zugzwang is, along with the altered role of the king and the relative increase in the pawns' value, the most important distinguishing feature of the endgame phase. Zugzwang (as well as mutual zugzwang) is widely employed with almost every material relationship in the endgame; it's unthinkable that you could play them well without it.

"Don't rush!" - is one of the principles of endgame technique. Before forcing matters and undertaking decisive action (especially when pawn exchanges are involved), you should first strengthen your position as much as possible. So it was in this endgame: see how exactly Black had to choose the right moment to send his king after the enemy pawns!

And now, let's look at a pair of examples where the bishop faces a knight.



Spassky - Fischer Santa Monica 1966
Black to move

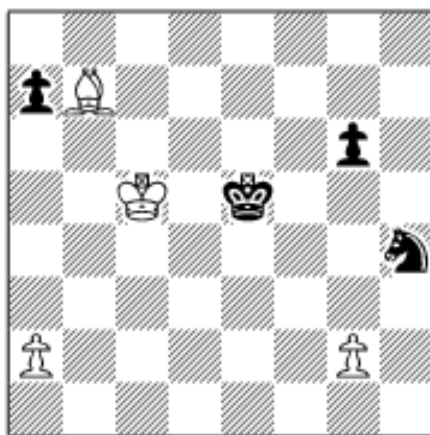
The bishop is stronger than the knight in open positions - especially when there are passed pawns.

White has no passed pawn yet, but he wants to continue g2-g4 (for instance, in reply to 39...Nd6), threatening to create one at the right moment. This threat keeps one of the enemy pieces tied to the kingside, upon which White's king makes its way to the queenside, to attack the Black pawns. This

is a typical endgame strategy, based upon the "principle of two weaknesses" (which you can explore further in the above-mentioned book by Dvoretsky and Yusupov).

And yet, contrary to present opinion, I believe that Black can hold. In spite of all else, *there are very few pawns left, which increases the chances of the weaker side*. The most stubborn line was the one suggested by Gligoric: **39...Nh6!** (and if 40. Kf4 Nf7! 41. g4 g5+). Averbakh continued this variation as follows: **40. Kd3 Nf5 41. Kc4 Nxe4** (of course not 41...Nd6+? 42. Kd5 Nxe4 43. Kxe4 c4 44. g4!, and the decisive factor is White's *outside passed*

pawn). 42. Kxc5 Ke5 43. Bb7



43...Kf4 44. Kb5 Kg3 45. Ka6 Nxc2 46. Kxa7+- (*the knight is usually helpless against a rook pawn*).

But instead of the desperate lunge by the king after the g-pawn, GM Zvjagintsev suggests a more restrained defensive plan: **43...Nf5!**, which promises Black real saving chances. 44. Kb5 is met by 44...Kd6 45. Ka6 Kc5 46. Kxa7 Kb4= (after the king gets to a3, the knight can be given up for the g-pawn). Or **44. a4 Ne3 45. Kb5 Kd6 46. a5** (46. Ka6 Kc5 intending 47...Kb4)

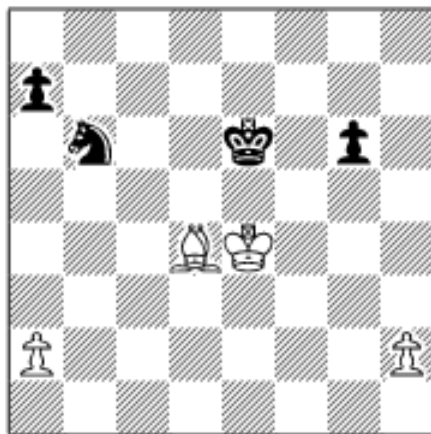
46...g5 47. Be4 g4 48. Ka6 g3 49. Kxa7 Kc7 50. Ka6 Nc4 51. Bf3 Ne3 52. Kb5 Kb8 53. Kc5 (53. Kb6 Nc4+) **53...Ka7 54. Kd4 Nxc2=.**

The move Fischer actually played made White's task much easier, since his passed pawn appeared immediately, without even having to pay the price of a pawn exchange.

39...g5? 40. h5 Nh6 41. Kd3 Ke5 42. Ba8 Kd6 43. Kc4 g4 44. a4

Black's king can only protect one of the two queenside pawns. Seeing that the a7-pawn is doomed, Spassky does not hurry to attack it, preferring to strengthen his position first.

44...Ng8 45. a5 Nh6 46. Be4 g3 47. Kb5 Ng8 48. Bb1 Nh6 49. Ka6 Kc6 50. Ba2, and Black resigned.



Krnic - Flear Wijk aan Zee 1988 White to move

Here, the players agreed to a draw. Krnic, most likely was simply unaware that the bishop completely dominates the knight here, and that therefore he could justifiably have expected to win.

41. Kf4 Nc8 (41...Kf7 42. Ke5, or 42. Bxb6 ab 43. Ke5 Ke7 44. a4) **42. Kg5 Kf7 43. a4! a5!?**

White's task is considerably simpler after 43...Nb6 44. a5, or 43...a6 44. Bc5 Kg7 45. a5.

44. Bc5 (*a standard technique - the knight is cut off at the edge of the board*) **44...Kg7 45. h3!**

Wilhelm Steinitz, the first World Champion, expressed the paradoxical thought that pawns stood best on their opening squares. The explanation: *In the endgame, it's useful to have a choice between advancing a pawn one or two squares forward.* Here is where we see "Steinitz's rule" in action! After 45. h4? Kf7 46. Kh6 Kf6, it would be White in zugzwang.

45...Kf7 46. Kh6 Kf6 47. h4 - zugzwang

The *opposition* belongs to White. The stronger side will always employ zugzwang in order to follow up with an *outflanking maneuver* (and the weaker side will use zugzwang to prevent it).

47...Kf5

Or 47...Kf7 48. Kh7 Kf6 49. Kg8 +- (the flanking maneuver)

48. Kg7 Kg4 (48...g5 49. h5) 49. Kf6!

If 49. Kxg6? Kxh4, Black's king has enough time to return to the queenside"
50. Kf5 Kg3 51. Ke6 Kf4 52. Kd7 Ke5 53. Kxc8 Kd5 54. Bb6 Kc4=.

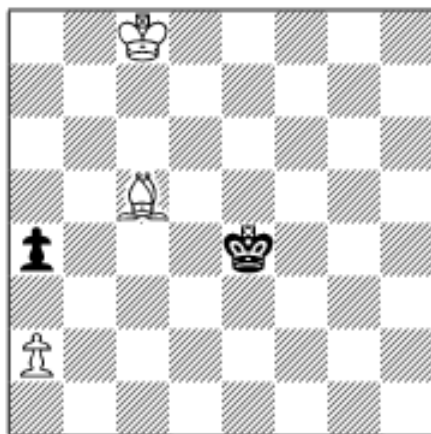
49...Kxh4 50. Ke6 Kg4 51. Kd7 Kf5 52. Kxc8 Ke6 53. Kc7 Kd5 54. Kb6+-

Curiously, Flear recommends 43. Kh6 (instead of 43. a4). The GM even gives his move an exclamation mark, although in fact it deserves a question mark instead. According to analysis by Zvjagintsev and Dvoretzky, it probably costs White the win.

43. Kh6? a5! (Flear only looks at 43...Nb6 and 43...a6, which are much weaker)
44. Bc5 (44. a4 Nd6 45. Kg5 Nc4) 44...a4! 45. h3 (no better is 45. Kh7 Kf6
46. Kg8 g5) 45...Kf6 46. h4 (zugzwang) Kf5 47. Kg7 Kg4 48. Kxg6.

To understand what follows, it is necessary to know the conclusions drawn many years ago by the well-known theoretician, Vsevolod Rauzer, in his study of the position with two rook pawns and an extra bishop which did not control the queening square. After 48. Kf6 Kxh4 49. Ke6 Kg4 50. Kd7 Kf5 51. Kxc8 Ke6, Black draws easily if White's pawn is on a3. Here, the pawn is on a2, which would give White the win (although it's pretty complicated),, if there were no Black g-pawn. That pawn, of course, changes the evaluation.

48...Kxh4 49. Kf5 Kg3! 50. Ke6 Kf4 51. Kd7 Ke4 52. Kxc8



Shouldn't White win here, though? After all, his pawn is at a2, and the Black g-pawn is gone? Not necessarily - not if Black can force the pawn to a3, and get back with his king.

52...Kd3! 53. Kd7 Kc2 (threatening
54...a3!)= 54. a3 Kd3 55. Ke6 Ke4!

To draw such positions, the Black king needs to be in the upper half of the board. (A simplistic formula, but quite sufficient for the practical player: it is not necessary to memorize more exact boundaries for the

drawing zone - especially since those vary, depending on the placement of White's pieces.) As it turns out, White cannot prevent Black's king from returning to the drawing zone. For example, on 56. Be7 Black can play either 56...Kf4 57. Bf6 Kg4! (but not 57...Ke4? 58. Be5!, with a theoretically won position) 58. Ke5 Kh5 59. Kf5 Kh6 60. Be5 Kh7!= (not 60...Kh5? 61. Bg7+-), or 56...Kd4 57. Bd6 Kc4! (not 57...Ke4? 58. Be5+- or 58. Bh2+-). I

give only the conclusions here; those wishing to see the proof, may consult any endgame reference.

In the article that follows, I shall show you some new analyses of several rook endings.

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Translated by Jim Marfia

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