Extra Pawn on the Side

The ending with material equality on one side, and an extra pawn on the other, is one of the most important, and also one of the most difficult segments of the general rook endgame. You will find a systematic exposition of the theory in my Endgame Manual. What I would like to bring to your attention here are two instructive examples of this theme, which will also be included in my forthcoming book, Endgame Tragicomedies.

Kashtanov – Inarkiev
St. Petersburg, 2004

About a year before this game was played, some revolutionary changes occurred in the theory of rook endings with an extra pawn on the opposite wing. I acquainted my pupil, Ernesto Inarkiev, with these new discoveries, which his opponent in this game knew nothing about (the Russian-language version of the Endgame Manual would not be published until two years later).

Inarkiev’s advantage in knowledge and understanding of this position proved effective: he won an objectively drawn ending. To be sure, the defense was not of the highest quality, even considering what we used to think about this ending.

42 Ra8?

42 Ke3 would have been much better. In such situations, the rook should keep an eye on the f7-pawn, and be ready to capture it as soon as the black king moves toward the opposite wing. But mainly, the text move allows Black to drive back the white king.

42…Kf5! 43 Ra7 Ra3+ 44 Kg2 Ke6
White will eventually have to advance his kingside pawns, and every tempo could prove decisive. This is why it makes sense to start active operations there as soon as possible. The standard plan in such positions would be 45 f3!, followed by 46 g4.

45…a5 46 Ra7!

The obvious 46 Ra6+? Kd5 leads to a position from the game Akopian – Kir. Georgiev, Las Vegas Wch 1999, with colors reversed (Diagram 9-166 in the Endgame Manual). The complicated analysis given in the book shows that White’s counterplay comes too late, so his position is lost.

46…a4 47 Ra5?

How many times can White make the same double blunder? Again, he takes his rook off the seventh rank, and postpones his kingside counterplay. After 47 f3!, it appears that the position would still have been drawn.

47…Ra2?!

The advance of the black king, sacrificing the f7-pawn, is very dangerous for White, either with the rook on a3 and White’s king on g2 (as in the above-cited endgame Akopian – Georgiev), or with the rook on a2 and the pawn on a3. Ernesto decided to play the second of these lines. Objectively speaking, 47…Kd6! was stronger, and should have won.

48 Kf3 a3

49 Ra7?

The concluding error, although a most excusable one. According to prior theory, the text move assures White an easy draw. Only recently was it discovered that White’s only chance to save himself is 49 g4!! You may find out all the rest in the detailed analysis of the Kantorovich/Steckner position from my Endgame Manual (Diagram 9-144).

49…Kd5! 50 Ke3
The main line is 50 Rxf7 Rc2 51 Ra7 a2 52 Kf4

The Swiss player Johannes Steckner discovered that after 52…Kc5!!, Black wins by a single tempo. For example, 53 Kg5 Kb6! 54 Ra3 Rc5+ 55 Kxg6 Ra5 56 Rxa2 Rxa2 57 Kxh5 Kc6+-.

50…Kc4 51 Rxf7 Rc2 52 Rc7+ Kb3 53 Rb7+ Kc3 54 Ra7 a2 55 f3 Kb3 56 Rb7+ Ka3 57 Ra7+ Kb2 58 Rb7+ Kc1 59 Ra7 Kb1 0-1

Sometimes, the stronger side is able to place his rook on the same rank as his passed pawn, in order to defend both it and his pawns on the other wing. Such a setup is exceptionally dangerous for the defender, since the king is then free to jump over and support its passed pawn.

Let’s examine an instructive endgame, badly played by Adrian Mikhalchishin, and poorly annotated by him in his book, Modern Endgame Practice. Some considerably deeper and more accurate notes were given by Boris Gelfand (first in Informant #80, and later in his book, My Most Memorable Games) – I shall rely on these.

Gelfand – Mikhalchishin
Istanbul Ol 2000

White’s rook cannot guarantee the protection of his kingside pawns, so one might suppose that the position is drawn. The guiding principle in defending such situations is generate counterplay on the kingside after White’s king has gone to the queenside. Well, such general advice is easily given. It is much harder to choose the only correct concrete way to do it. Let’s examine the different possibilities.

A) 54…Kh7?? The passive defence I rejected – White will sacrifice the g4 pawn to control the a-pawn with his king. It is too late for Black’s counterplay …g7–g6 (Mikhalchishin).

This note makes no sense: he does not explain under exactly what circumstances White would be justified in sacrificing the g4-pawn for nothing (when in fact, it should not be given up at all). Since Mikhalchishin’s “analysis” stops here, while Gelfand did not examine moving his king to h7, I had to study it for myself. The results were pretty interesting.
55 Ke3? Rxg4 56 a6 (56 Kd3 Ra4 57 Ke3 g6 =) 56...Ra4 57 Rb6 Ra5 =, or 55 g5? hg 56 Rxg5 Kh6 57 Kc5 g6 are useless.

It is more logical for White to play for zugzwang: 55 Rc5!. Now 55...g6 leads to a position that we will examine later on (cf. 54...g6?!). Here we shall test a continuation of Black’s waiting tactics by 55...Kg8, and the move 55...g5.

A1) 55...g5 56 Rc7+ Kg8 57 Ra7

Black cannot just jog in place: White would continue 58 a6, and send his king after the a-pawn. 57...Rf4+ 58 Kg3 Re4 might look tempting, with the idea 59 a6? Re6! 60 Kf3 Kh8, when Black has a guaranteed draw, because his rook simultaneously locks White’s king up on the kingside, while tying White’s rook to the pawn’s defense. However, White has the winning 59 Ra6!, allowing the rook to get off the a-file and move the pawn up to a6. For example, 59...Kh7 60 Rb6 Ra4 61 a6 Kg7 62 Rb7+ Kf6 63 Rh7 Ra3+ 64 Kf2 Ke5 65 Rxh6+-.

We must also check 57...Kf8 58 a6 Ke8 59 Ke3 (59 Ra8+ Kf7 60 Ke3 Kg7 = would be premature – with his next move, Black intends to snap off the g4-pawn) 59...Kd8 60 Ra8+! Kc7 (60...Ke7 61 a7 Kf7 62 Rh8+-).

After Black’s king moves to the queenside, White should plan on securing the g4-pawn with his king. 61 Kf2! wins; for example, 61...Rf4 + 62 Kg3 Rf6 63 a7 Kb7 64 Rg8 Kxa7 65 Rg6+-.

An instructive draw occurs after the mistaken 61 Kd3? Rxg4 62 Rh8 Kb6 63 Rxh6+ Ka7.
After 64 Rg6 Rh4 65 h6 (65 Rxe5 Kxa6 =) 65…Ka8, the white king, permanently cut off on the fourth rank, cannot get close to its pawns; and without its help, they can never queen.

But if White leaves the rook at h6, then a position of mutual zugzwang inevitably arises, with the rook on h4 and the king on g3, and White cannot obtain this position with Black to move. For example, 64 Ke3 Rh4 65 Kf3 Re4+ 66 Kg2 Rg4+! (but not 66…Rh4? 67 Kg3+- zugzwang) 67 Kh3 Re4 68 Kg3 Rh4 = zugzwang.

A2) 55…Kg8

Once again, the pawn sacrifice does not work: 56 Ke3? Rxg4 57 a6 Ra4 58 Rc6 Kf7 59 Kd5 Ke7 60 Kc5 Re6 61 Kb5 Ra5, and draws. Therefore, White continues 56 Rc8+!.

After 56…Kh7 57 Ra8, the attempt to attack the a-pawn from the flank by 57…Rc4 58 a6 Rc6 (generally speaking, this is a typical method of defense against a rook pawn) fails to achieve its aim, in view of the rook’s inability to operate freely on the f-file (without the important square f5); and on the e-file, it is too close to the pawn.

Here’s a sample variation: 59 Ke4 Rb6 60 Kd5 Rf6 61 Ke5 (threatening 62 Kb5) 61…Re6 62 Kb5 Re5+ 63 Kc6 Re6+ 64 Kc7+-.

And if 56…Kf7, then 57 Ra8? Kf6 58 Ra6+ Kf7 = no longer works. White plays 57 Rc7+! Kf6 (57…Kg8 58 Ra7) 58 Rc6+ instead, with 59 a6 to follow, reaching the same winning position as in the game. We shall analyze that later on.

B) At first, Gelfand thought that Black could draw by playing 54…g6?!; but while preparing his book for publication, he found the winning method for White.
W?

55 hg? Kg7 56 Kg3 Kxg6 57 Kh4 Ra1 58 Rb6+ Kg7 59 Ra6 Rh1+ 60 Kg3 h5 = is not a problem.

After 55 Ke3?! gh (but not 55…Rxg4? 56 Rb8+ Kg7 57 Rb7+ Kf6 58 Rb6 + Ke5 59 Rxg6+–) 56 gh Kf7 57 Kd3 Ke6 58 Kc3 (58 Rb6+ Kf5) 58…Kd6 59 Kb3 Ra1, the a-pawn is no longer a threat: White will have to trade it for the pawn at h6. The game might continue as follows: 60 Kb4 (60 Rb6+ Ke5 61 Ra6 Kb5 62 Rxf6 Rxa5 63 Rh8 Kb6 64 h6 Kb7 65 Ke4 Ra6 = changes nothing) 60…Rb1+ 61 Kc4 Ra1 62 Rb6+ Kc7 63 Rb6+ Kc7 64 Rb6+ Kc7.

On the board, we have the so-called “Vancura Position,” which every chessplayer will find useful to include in his briefcase of endgame knowledge. The rook attacks the pawn from the side, keeping the opposing rook tied to the h-file, and checking the king away from the pawn when it goes to the kingside.

55 Rb8+! Kg7 56 Rb7+ is considerably stronger. The king cannot move forward and remain cut off on the eighth rank. Let us examine 56…Kg8 57 Ra7 gh 58 gh Kf8 59 a6 Ke8.

As in the similar situation from the 54…Kg8 variation (where the pawns at g4 and g5 were still on the board), the major subtlety of the position is that White must give check with the rook at a8 at exactly the right moment – not too early, nor too late.

B1) The immediate 60 Ra8+? leads to a draw: 60…Kf7 61 Ke3 Kg7!

(just not 61…Kf5? 62 Rg8+–) 62 Kd3 Ra5 63 Kc4 Rxf5 64 Kb4 (64 Re8
Ra5 65 Rc6 h5 66 Kb4 Ra1 67 Kb5 h4 =) 64…Rh1 65 Rc8 Ra1 66 Kb5

66…Rh1+!

A standard technique: to avoid interference, the king is checked into a less favorable position. 66…h5? loses to 67 Rc5! Kg6 68 Kb6.

67 Kc6 Ra1 68 Kb7 Rb1+! 69 Ka8 Kg6 =

B2) 60 Ke3 Kd8

Waiting tactics do not make much sense here: 60…Kf8 61 Kd3 Ke8, and White does not play 62 Kc3 Kd8 63 Kb3 Ra1 64 Kc4 Kc8 65 Ra8+ Ke7 66 a7 Kb7 =, but 62 Ra8+! Wherever the king goes, White wins easily: 62…Kf7 63 Kc3 Kg7 64 Kb3 Ra1 65 Kb4+-, or 62…Kg7 63 a7 Kc7 64 Rh8 Rxa7 65 Rh7+ Kb6 66 Rxa7 Kxa7 67 Ke4+-.

61 Ra8+! Kc7 (61…Ke7 62 a7 Kf7 63 Rh8) 62 Kf3! Ra5 (62…Rh4 63 Rh8 Kb6 64 Rxh6+; 62…Kb6 63 Rh8 Kxa6 64 Ra8+) 63 Kg4 Rg5+ 64 Kh4 Ra5 65 a7 Kb7 66 Rh8 Ra4+ 67 Kg3 Kxa7 68 Rxe6 Ra5 (68…Kb7 69 Rg6+-)

If the black rook were on c5, we would have the drawn Vancura position. We would inevitably arrive at the same situation, if the white king stood a
little farther away from the pawn. But here, it stands ready to support the pawn, and it cannot be driven away by checks, since the black king interferes with its own rook. Here’s a sample line: 69 Rh7+ Ka8 70 Kg4 (70 h6?? Ra6! 71 Kg4 Rc6 =) 70...Ra4+ 71 Kg5 Ra5+ 72 Kg6 Ra6+ 73 Kf7 Ra7+ 74 Kg8 Ra5 75 h6 Ra6 76 Rh8! Ra7 (White threatened 77 Kg7, discovered check) 77 Kf8+-, as 78 Rg8 is coming next.

For a full picture, recall that at the very beginning of this variation, the black king could have immediately gone over to the queenside: 56...Kf8 (instead of 56...Kg8) 57 Ra7 gh 58 Kg7 Ke8 59 a6 Kd8. But this would have changed little: 60 Ra8+ Kc7 61 a7 (61 Kg3? would be a mistake: 61...Ra5 62 a7 Kb7 63 Rh8 Kxa7 64 Rxh6 Re5 – this is the Vancura position) 61...Kb7 62 Rh8 Kxa7 63 Rxh6

We already know what happens after 63...Ra5 64 Rh7+ and 65 Kg4. And 63...Kb7 should be answered, not by 64 Rg6? Rh4 65 h6 Kc7 66 Kg3 Rh1 =, nor by 64 Rh8? Re4! =, intending 65...Re5, but by 64 Rh7+! Kc6 (64...Kb8 65 Kg3 Ra5 66 Kg4+) 65 h6 Rh4 (Black can no longer attack the pawn from the side; and the rook behind the pawn is known to be lost for Black) 66 Rh8+-.

C) Mikhalchishin rightly considers 54...g5! to be the correct move here. He examined the variation 55 Rb6 (55 Rb8+ Kf7 56 Ra8 Kf6 57 a6 Kg7 =, or 56 Rh7+ Kf6 57 Rb6+ Ke5 58 a6 Ra3+ 59 Ke2 Kf4 60 Rxh6 Kxg4 61 Kd2 Kh4 = Gelfand) 55...Rxa5 56 Rb6 Ra5 57 Kd2 Kg7 58 Rd4 Re5 59 Ke4 Re2 60 Rh5 Re2 61 Rxg5 Rh8 62 Rh5 Kg7 63 Kf4 Rd8+, and White cannot make progress.

It seemed to me that after a subsequent march of the king and the move Rd6-d5, the endgame could not be held, but I did not notice that Black keeps the rook on e5 and makes a draw – this also shows poor knowledge of a theoretical position (Mikhalchishin). Well, let’s just say that “poor knowledge of theoretical positions” does not mean much here, since the position is not a theoretical one. What we should be talking about here is a theoretical technique – cutting off the king. In fact, 57...Re5! gives Black an uncomplicated draw: 58 Kg6 Ke7 59 h6 Kf7 60 h7 (60 Kg7+ Kf6) 60...Re8 61 Rg5 Rh8 62 Rh5 Kg7 63 Kf4 Rf8+, and White cannot make progress.

On the other hand, it is not clear how he was going to win after 57...Ke7 58 Rd4 Kf6 (59 Ke4 is met by 59...Re5+), either.

As you may see, the only correct path turned out not to be so complex,
after all. Now, the refutation of the alternative possibilities required a great deal of hard analysis – but that way, you do not have to do it during play!

D) Black’s mistaken choice of 54...Kf7? in the actual game (which Mikhalchishin awarded a “!?”) would only have justified itself if White had played 55 g5? hg 56 Rxg5 Kf6 57 Rb5 g6! (or 57...g5! – as long as Black does not play 57...Ke6 58 Ke3 Kd6? 59 Kd3 Kc6 60 Rg5 and 61 Rg6+, when White wins) 58 h6 (58 Rb6+ Kg5 =) 58...Rh4 59 a6 Rxh6 60 Ra5 (60 a7 Rh3+) 60...Rh8 61 a7 Ra8 =.

55 Rb7+! Kf6 (55...Kg8 56 Ra7 is no fun for Black either) 56 Rb6+ Ke5 57 a6

This is the ideal layout of White’s forces that we spoke of when we introduced this example. The rook defends the passed pawn from the side, while simultaneously protecting, from g6, his own kingside. Such situations are won, as a rule: marching the king over to the passed pawn is decisive. And if Black’s king comes and stands in the way, then the king’s wing will be left undefended.

57...Ra3+ 58 Ke2 Kd4 59 Rd6+ Ke4 60 Kd2 Ke5 61 Rg6 Ke5 62 Kc2

On 62 Rxa6 63 Kg6, Mikhalchishin gives 63...Rf4 =, although of course 63...Rg6 64 hg Ke6 = would do equally well.

62...Kc4?

62...Ra4? 63 g5 hg 64 Rxa5+ Kc6 65 Rxa7 loses at once (Mikhalchishin), but the text move was no better. There followed 63 Kb2 Ra5 64 Rg7 Rx6 65 Kg6 Ra4 66 Rxa4 Rd5 67 Kg5 Kc3 68 Rc5+ (68 Rd5+ =) 68...Kd4! (all exclamation marks are Mikhalchishin’s).

He could have held out far longer after 62...Kc5!. The grandmaster believes Black could have saved the game. He gives the line 63 Rg7 Rx6 64 Kg6 Rd6! 65 Kc3 (65 Kg5 Rd5! =) 65...Nd4! (all exclamation marks are Mikhalchishin’s).

But, in fact, as the following analysis will make clear, the final position of his variation is lost. However, Black can in fact save himself by 64...Ra4! (instead of 64...Rd6?) 65 Kg3 Kg5 66 Ke3 Kg5 67 Kg3 Ra3+ (67...Rf4+
68 Kg3 Rf6 = is not bad, either) 68 Kg2 Kf4 =.

And yet, as Gelfand demonstrated, 62...Ke5 would not have saved Black. Before capturing on g7, White would need to improve his king’s position, and take away the a4-square from Black’s rook. This can be done by 63 Kb2! Ra4 64 Kb3 Ra1, and only now playing 65 Rxg7 Rxh6 66 Rg6 Rd6! (here indeed, Black has nothing better).

67 Kc3 (of course not 67 Rxd6? Kxd6 68 g5 Ke6 69 g6 Kh6 =) 67...Rd4! (67...Kd5 68 g5!+-) 68 g5! (Mikhailchishin only looks at 68 Rc6? Kxc6 69 Kxd4 Kd6 =) 68...Rd5 69 Ra6! Kb5 (69...Rxc5 70 Ra5+ Kd6 71 Rxc5 +-) 70 Rxh6 Rxc5

71 Kd4! (71 Rh8? Ke6 72 h6 Kb7! lets slip the win) 71...Ka5 72 Ke4!

Getting the king closer to the pawn is important. The hasty 72 Rh8? would be a mistake: 72...Kb6 73 h6 Kb7 (threatening 74...Rg6, with the “Vancura Position”) 74 Rf8 Rh5 75 Rf6, and Black’s king gets back to the kingside in time: 75...Kc7 76 Ke4 (76 Ra6 Kb7!) 76...Kd7 77 Kf4 Ke7 =.

72...Rb5 73 Rh8! Rb4+ (73...Ka6 74 h6 Rb4+ 75 Kd5 Rb5+ 76 Ke4 Rh5 77 Kd4+-) 74 Kd5 Rb5+ 75 Kc6 Rb6+ 76 Ke7+-.

I will add one tiny note to Gelfand’s analysis: instead of 71...Ka5, let’s try 71...Rf5 72 Ke4 Rc5 73 Rh8 (otherwise, Black starts checking from the side) 73...Kb6 74 h6 Kb7.

In order to prevent Vancura Position (with 75...Rc7), White wants to play
75 Rg8 (or 75 Rf8), but after 75…Rh5 76 Rg6? (76 Rh8!) 76…Kc7 77 Kf4 Kd7 78 Kg4 Rh1, Black’s king gets back just in time to the kingside.

The clever check 75 Rh7+! attains our goal. On 75…Kc6, White can reply either with 76 Kf4 (the rook cannot use the c6-square now), or with 76 Ra7 Rh5 77 h7 Kd6 78 Ra6+! Ke7 79 Ra8!. And after 75…Kb6 76 Rg7! Rh5 77 h7 Kc6 78 Kf4 Kd6 79 Kg4 Rh1 80 Kf5, White’s king will win the king race.