

NOTES

PERFECT PROSE

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I have just spent six months writing a new book *Secrets of Rook Endings*, which will soon be published by B.T. Batsford. It includes the most detailed ever coverage of the ending of KRPKR, but the unique feature of the book is that all the moves in it are accurate.

This was achieved with the aid of Ken Thompson's endgame CD-ROM and Lars Rasmussen's user interface program. Using the CD-ROM I was able to correct mistakes in previous analyses of this ending, but it would be wrong to assume that the computer was only used for destructive purposes. In fact I obtained the most enjoyment from the many new discoveries made possible by the CD-ROM and included in the book. I will give just one example.

The concept of reciprocal zugzwang should be familiar to readers of this magazine. It may be defined as a position in which whoever is to move has to weaken his own position. In a KRPKR position we can be even more precise about what the term reciprocal zugzwang means; it implies a position in which Black to play loses, but White to play can only draw. In particular White has no waiting move to preserve the zugzwang. I asked a number of grandmasters how many positions of reciprocal zugzwang they thought existed in the ending KRPKR. The answers were in the range 5 to 25 positions. In fact there are 209 such positions.

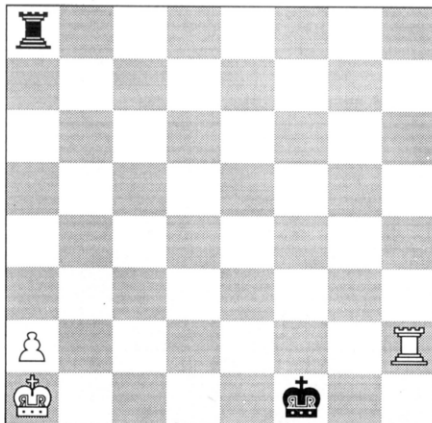


Diagram 1: White to play: Draw;
Black to play: White wins.

It is hard to believe that the position of Diagram 1 is a position of reciprocal zugzwang. For example, readers should try to guess why the move 1. ... Ke1 fatally weakens Black's position. The hidden point will be revealed later in the analysis.

In *Secrets of Rook Endings* the symbol ! has a very precise meaning, and this new convention is also adopted in the following analysis. An ! after a white move means that it is the only move to win, while an ! after a black move means that it is the only move to draw.

The first point to make is that if White succeeds in advancing the Pawn while keeping Black's King cut off then he normally wins. This means, for example, that 1. Kb2 threatens 2. a3 and must be met by 1. ... Rb8+.

We first of all show why the diagram is a draw with White to move:

W1) 1. **Kb2** Rb8+! 2. Kc3 Rc8+ 3. Kb4 Rb8+! 4. Kc5 Rc8+ 5. Kb6 Ra8! 6. Rc2 (6. Kb7 Ra3) Ke1! (not 6. ... Ra3? 7. Kb5 and the Pawn advances, nor 6. ... Kg1? 7. Kb5! Rb8+ 8. Kc4 Rc8+ 9. Kb3! Rb8+ 10. Kc3 Rc8+ 11. Kb2 Rb8+ 12. Ka1 Ra8 13. Rc4 and White wins as after 1. ... Kg1 below) 7. Kb5 Kd1 8. Rh2 Rb8+! and Black simply checks the King back to a1.

W2) 1. **Rh4** (intending Kb2 coupled with a4, but it releases Black's King) Ke2 2. Kb2 Kd3! 3. a4 (3. Kb3 Rb8+! 4. Rb4 Rc8 is a simple draw) Rb8+! 4. Ka3 (at first sight White can win by edging his pieces up the

a-file, but Black has a hidden defence) Kc3 5. a5 Rb1 6. Ka4 Rg1 (this is a key drawing position with Black's King cut off on a rank) 7. a6 (after 7. Kb5 Rg5+ there is no shelter, or 7. Rh6 Kc4 drawing) Rg6! 8. Kb5 Rg5+! and Black draws.

W3) 1. Rc2 Ke1! (the same reply answers 1. Rd2 and 1. Rb2) 2. Kb2 Rb8+ 3. Kc3 Rc8+ draws.

Now we consider the diagram with Black to move.

1. ... Ke1

This is the most obvious move, bringing the King towards the enemy Pawn. Other moves:

1) 1. ... K**g1** (this gives White an extra tempo over line W2 above) 2. Rh4 Kf2 3. a4 Ke3 4. Kb2 Kd3 5. Kb3! Rb8+ 6. Rb4! Ra8 7. Rb5 Rc8 8. a5 Rc1 9. Rd5+! Ke4 10. Rd8! (the only move to win; 10. Rd7? Ke5! draws after 11. a6 Ra1 or 11. Kb4 Ke6 12. Rd3 Rb1+ and there is no place for White's King to hide) Ke5 11. Kb4 Ra1 12. Kb5! Rb1+ 13. Kc6 Rc1+ 14. Kb6 Rb1+ 15. Ka7! Ke6 16. a6! Ke7 17. Rb8! and wins.

2) 1. ... R**a7** (if the Rook moves anywhere on the eighth rank White simply plays a4) 2. Kb2 Rb7+ (2. ... Ra8 3. Rh4 Ke2 4. a4 transposes to line 1 above) 3. Kc3 Rc7+ 4. Kb4 Rb7+ 5. Kc5 Ra7 6. Kb5 Rb7+ 7. Ka6 Rb4 8. Ka5 Rb8 9. a4 Ke1 10. Ka6 Ra8+ 11. Kb5! Rb8+ 12. Kc6 Ra8 13. Rh4 followed by Kb7 and the Pawn advances.

2. Kb2! Rb8+

Or 2. ... Kd1 3. Rh4 Kd2 4. Kb3! Rb8+ 5. Rb4 Rc8 6. Rd4+ Ke3 7. Rc4 Ra8 8. a4 Kd3 9. Rb4 transposing to line 1 in the previous note.

3. Kc3 Rc8+ 4. Kb4 Rb8+ 5. Kc5 Ra8

5. ... Rc8+ 6. Kb6 Ra8 7. Kb7 transposes.

6. Kb5 Rb8+ 7. Kc6 Ra8 8. Kb7 Ra3 9. Kb6!

This is also the reply to 8. ... Ra4 and 8. ... Ra5; in all cases White threatens to force the advance of his Pawn by playing Kb5 and, if necessary, Kb4.

9. ... Ra8

After 9. ... Kd1 10. Kb5! Kc1 11. Kb4! Rg3 12. Rh4! (a necessary finesse; White shields his King from sideways checks) Kb2 13. a4! the Pawn romps home.

10. Rh4!!

This move is the hidden reason why Black's King is badly placed on e1; using a tactical resource White advances his Pawn to a4.

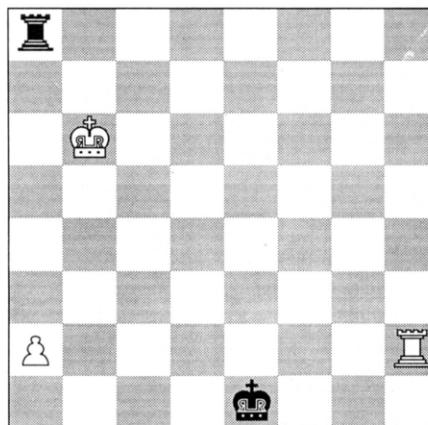


Diagram 2: Position after 9. ... Ra8.

10. ... Ra3

The only way to prevent an immediate a4. 10. ... Rxa2 loses to 11. Rh1+ and 12. Rh2+.

11. Kb5! Kd1 12. Rh2

Now the advance of the Pawn is inevitable.

12. ... Rg3

The only chance is to attack from the side because 12. ... Kc1 13. Kb4! wins after 13. ... Ra8 (or 13. ... Rg3 14. Rh4!) 14. a4! Rb8+ 15. Kc5 as in line 2 in the note to Black's first move.

13. a4 (the rest is easy) Rg5+ 14. Kb4 Rg4+ 15. Kb3 Rg3+ 16. Kb2 Rg5 17. Rh4 Kd2 18. Kb3 Kd3 19. Kb4 followed by a5 and White wins.

Secrets of Rook Endings will be published by B.T. Batsford in October.