

Endgame Explorations 6: Underpromotion (Part 1)

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As promised in the previous installment, we turn now to the theme of underpromotion: upon reaching the far rank a pawn may become a knight, rook or bishop instead of the ordinary queen. Now a knight promotion, while unusual, occurs occasionally in practical play, where it affects the outcome of some basic endgames (such as White Kc7, b6, Black Kc5, Rh6: White draws only by 1 b7 Rh7 2 Kc8 Kc6! 3 b8N!), provides a crucial middlegame check (usually involving a mating attack or a royal fork—for a recent example of the latter see No. II of “What’s the Best Move?” on p.52 of the 10/89 Chess Life), and culminates the Lasker Trap in the Albin Counter-Gambit (wherein Black wins only by making a third knight on his seventh turn— see p.24 of the May-June 1989 issue of Chess Horizons). Last year I had the rare occasion for promoting to a knight without check in the middlegame:

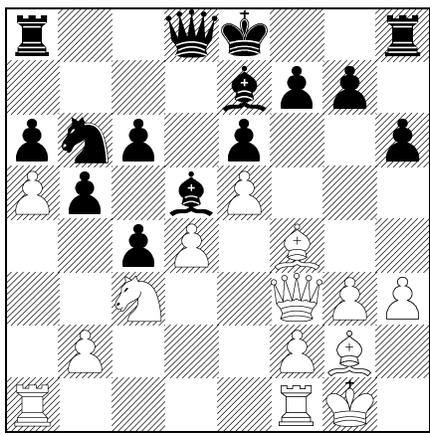


DIAGRAM1 (Elkies-Soules, after 15.a5)

White: Kg1,Qf3,Ra1,Rf1,Bg2,Bf4,Nc3,a5,b2,d4,e5,f2,g3,h3;

Black: Ke8,Qd8,Ra8,Rh8,Be7,Nb6,Bd5,a6,b5,c4,c6,e6,f7,g7,h6

This occurred in a casual speed game; so far we had played normally if not accurately, but now Black begins to “complicate”: 15 ... Nc3?! 16 Qc6 Qd7? (here I could win a piece with 17 bc3, so 16 ... Kf8 was indicated. But I was distracted by visions of queening:) 17 ab6? Ne2 18 Kh1 Rd8 19 b7 0-0, and here 20 b8Q Qc6 21 Qd8 Qg2 etc. would win the exchange, but then I saw 20 b8N!!? When the laughter subsided, play continued 20 ... Qd4 21 Na6 Nf4 22 gf4 Qf4 23 Qb5 Rd2 24 Ra4 and White eventually repulsed Black’s counterplay and cashed in on the extra piece. I later found the alternative 20 Be3 Nd4 (else the knight gets trapped) and now 21 b8N!! is the only move and leaves White a piece up without compensation after Nc6 22 Nd7, Qc6 22 Nc6, or Qa7 22 Qe4 (of course not 21 ... Rb8?? 22 Qd7).

While this setup for a knight promotion would be as atypical in an endgame study (because of all the heavy artillery required) as it is in practical play,

endgame composers have created literally hundreds of different contexts for obligatory knightings. Witness the following specimen from the beginning of our century, wherein V. Bron combines underpromotion with the themes of stalemate, domination and zugzwang we've explored in earlier columns:

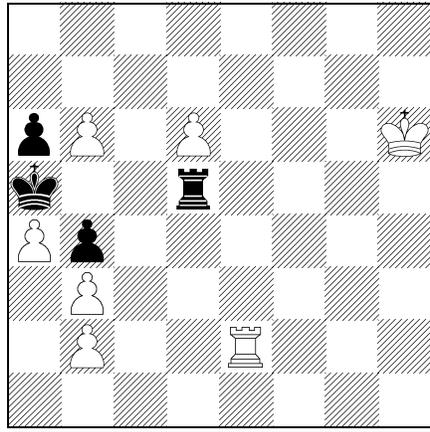


DIAGRAM2 (White to play and win)

White: Kh6,Re2,a4,b2,b3,b6,d6; Black: Ka5,Rd5,a6,b4

1 Re5! (diverting Rd5 from the d-file, else Black draws by snaring both of White's advanced pawns) Re5 2 d7 Re6 (one of the pawns will queen now, so Black organizes a stalemate defense. The alternative 2 ... Rd5 3 b7 Rd7 4 b8/Q Rd6(h7) etc. [remember the first Endgame Explorations column?] fails because White can contrive to either capture the rook with his queen, breaking the stalemate, or sacrifice queen for rook and win the pawn endgame. Thus 4 ... Rd6 5 Kg5 Rg6 6 Kf5 Rf6 7 Ke4 and Rf4 8 Qf4 or Re6 8 Qe5!) 3 Kg5! Rb6 (for 4 d8/Q stalemate; if Rd6 4 b7 Rd7 5 b8/Q and wins as above) 4 d8/N!! (mutual zugzwang!) and thanks to White's third move the rook has no safe square: Rb8(d6) 5 Nc6(b7) and wins.

All these knight promotions are, at least in part, "positive", in that the promoter takes advantage of powers of the knight not shared by the queen; thus, as Tim Krabbe observes in *Chess Curiosities*, knighting hardly counts as a true "underpromotion". In contrast, a rook or bishop promotion must be purely "negative": since a queen can make any move that a rook or bishop can, such a promotion can only serve to avoid the queen's extra powers. Thus stalemate must be involved, restricting the relevance of these underpromotions in actual play to the endgame, and even there they are very rare. Still, even the most stubbornly result-oriented chessplayer must have seen and enjoyed the rook promotion concluding Saavedra's immortal study (White Kd5, c6, Black Ka1, Rd5: 1 c7 Rd6 2 Kb5! [Kb7(c5) Rd7(d1)=] Rd5 3 Kb4 Rd4 4 Kb3(c3) Rd3(d1) 5 Kc2 Rd4! 6 c8/R!! [c8/Q? Rc4! 7 Qc4 stalemate] Ra4 7 Kb3 Rany 8 Rc1#). It is curious that this natural-looking position has yet to appear over the board; but another setup for a rook promotion does occur in practice from time to time (see for instance p.40 of the October 1988 Chess Life): in endgames such as White Kg2, Rb2, c6, Black Ka8, Rd1, White wins by 1 c7 Rc1 2 Rb8 Ka7 and then not 3 c8/Q? Rh1! drawing by stalemate or perpetual check, but 3

c8/R!—but more frequently both players overlook the stalemate resource and Black resigns after 2 Rb8 or even after 3 c8/Q?. In 1928 Kubbel nicely combined this idea with a knight promotion in the following miniature:

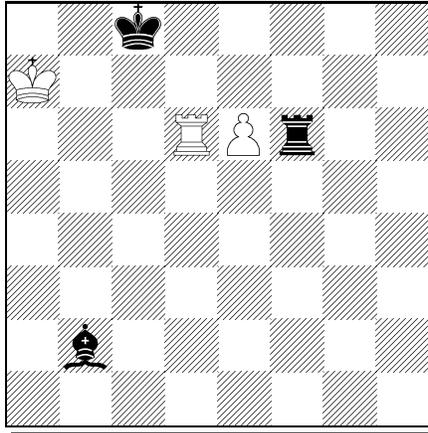


DIAGRAM3 (White to play and win//4th Prize, Magyar Sakkvilag)

White: Ka7,Rd6,e6; Black: Kc8,Rf6,Bb2

1 e7 (for Rd6 2 e8/Q Kc7 3 Qb8 and 4 Qb2, or 2 ... Rd8 3 Qc6#) and Black has two similar stalemate defenses which White refutes with different underpromotions: 1 ... Bd4! 2 Rd4 (Ka8? Rd6 3 c8/Q Kc7 draws) Re6 3 Rd8 Kc7 4 c8/R! (not c8/Q? Ra6!=), and 1 ... Kc7 (for 2 e8/Q Bd4! 3 Rd4 Ra6=) 2 e8/N!.

Just as one may underpromote offensively to avoid stalemate, one may underpromote defensively to create stalemate. This effect is hardest to achieve with a rook promotion: while a bishop or knight may be either pinned or immobilized immediately upon promotion, a rook has to either move to be pinned or be immobilized later. The pin-stalemate is beautifully demonstrated in this study by the Czech composer Matous:

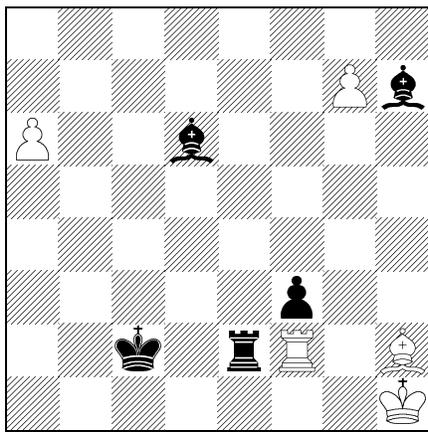


DIAGRAM4 (White to play and draw//1st prize, Israel 1985)

White: Kh1,Rf2,Bh2,a6,g7; Black: Kc2,Re2,Bd6,Bh7,f3

1 a7! (hopeless are 1 Bd6? Rf2 2 a7 Rf1 3 Kh2 Ra1, 1 Bg1 Bc5 2 Rf1 f2 3 Bh2? Be4#, and 1 Rf3? Be4) Rf2 2 Bg1 (a8/Q? Rh2 mates in two; now 2 ... Be4? 3 Bf2 and White even wins, so Black sets up a new mating net) Rh2! 3 Bh2 Be4! (for 4 g8Q f2 5 Qg2 Kd1! and 6 Qe4 f1/Q 7 Bg1 [or 6 Bg1 f1Q 7 Qe4] Qh3 and mate next; if 4 Kg1? Bc5 5 Kf1 Bd3 6 Ke1 f2#) 4 a8/Q! Ba8 5 g8/R!! f2 (Black must follow through; Bb7 6 Bg1 f2 7 Rg2 or Bd5 6 Rc8 and 7 Kg1 is an easy draw) 6 Rg2! Kd1! (to unpin the pawn, else 7 Bg3(g1)=) 7 Bg1! and White is stalemated after f1/Q (a counter-underpromotion doesn't help Black here: 7 ... f1/R is still stalemate, and the fanciful f1/B only draws since a bishop trade will leave Black with insufficient mating material) or 7 ... Ke1!? 8 Bf2 Kf1 9 Bg3! Bg3.

I leave Bishop promotions and various multiple underpromotions for my next column.