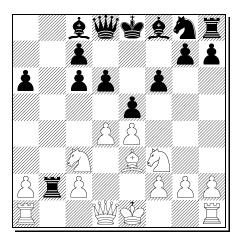
## **Endgame Explorations 11: Castling**

## Noam Elkies

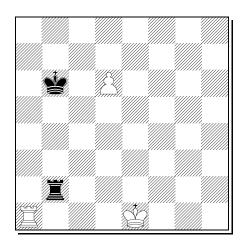
Every chessplayer knows that castling is the only legal way to move two pieces at once, and the only legal occasion for the king to leap over a square. In practical play this unique move usually becomes the basis for a stereotyped defensive formation around the king, but occasionally it has a specific tactical significance, as in the following memorable game (Feuer-O'Kelly, Liege 1951): 1. e4 e5 2. Nf3 Nc6 3. Bb5 a6 4. Ba4 d6 5. Bxc6+ bxc6 6. d4 f6 7. Nc3 Rb8 8. Be3! Rxb2(?)



Feuer-O'Kelly, after 8. — Rxb2

9. dxe5 fxe5 10. Nxe5! fxe5? 11. Qxd8+ Kxd8 12. 0-0-0+! The king leaps to attack Rb2, while at the same time Rd1 gives check; so White picks up Rb2 and emerges the Exchange ahead, winning.

Endgame composers, predisposed towards the unusual and offbeat in chess, naturally like to feature castling, as in the following setting by Selesniev of the Feuer-O'Kelly theme:



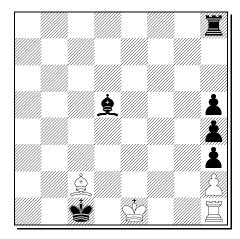
White to play and win

The solution is simple, especially given the theme: 1. d7 Kc7 2. d8Q+! Kxd8 3. 0-0-0+ and wins; but note the tries 1. Rd1? (or 1. 0-0-0?) Rh2! (or Ra2!)

2. d7 (else Rh8(a8)) Rh1(a1)+ 3. Ke2(c2) Rxd1 4. Kxd1 Kc7, 1. Rc1 Rb5, and 2. 0-0-0? (still too early!) Rb8.

The alert reader will ask how do we know that 3. 0-0-0+ was legal: given the initial position of Selesniev's study, couldn't the White king or rook have moved in the past, invalidating the castling? Well, yes, they could have, and indeed it is not possible to construct a position where castling can be proved legal without further information (for all we know, White could have opened with 1. Nc3, 2. Rb1, 3. Ra1, 4. Nb1...). To avail themselves of the use of castling, composers follow the convention that in composed endgames (and in problems too) Castling is legal unless it can be proven illegal by retrograde analysis. (For instance, if Black has only Ke8 and Rh8, one of them must have made the previous move, so Black cannot castle. By the way, for the other move whose legality depends on the history of the position, namely the en passant capture, the opposite convention holds: on the first move, a pawn can be captured en passant only if it can be proven to have just moved two squares. But en passant captures and retrograde analysis do not concern us here.)

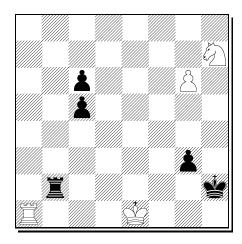
For an example of *Kingside* castling we turn to a study by G. Nadareishvili (7th Prize, *Magyar Sakkélet* 1980):



White to play and draw

Black's extra tripled pawns do not constitute a decisive advantage, but White is about to lose a piece (Rh1 and Bc2 are both attacked), and so must look for stalemate. The try 1. 0-0+!? Kxc2 2. Rf8! Rxf8?, stalemate, fails to 2. ... Rh7! (3. Rf7 Bxf7!), so White first lures Bd5 off the a2-g8 diagonal: 1. Be4! Bxe4 2. 0-0+! Kd2 3.Rf8! Rh7 4.Rf7! now this works, because the threatened 5. Rxh7 Bxh7 would bring about a book draw (WK can be neither ejected from the corner nor mated in it). Black can now try 4. ... Rh6 5. Rf6! Bg6!, exploiting the b1-h7 diagonal, but White laughs last with 6. Kh1!, threatening a new stalemate by 7. Rxg6! Rxg6. There remains only 6. ... Be4+ 7. Kg1, and White draws by repetition of position or stalemate.

The castling in this Nadareishvili endgame was incidental to the main theme of an unusual draw by repetition. In our last example (for which I won first prize in the 1987 Israel "Ring" tourney) castling is again the main attraction:



White to play and win

1. g7 g2 or Rb8 2. Nf8 g2 and now not 3. 0-0-0!? Rd8! 4. Re1 Re8! with repetition, since after 5. Rg1!? Kxg1 6. g8Q Re3 White can hope for no more than a draw, but 3. Kd2! Rb2+ 4. Kc3! (against Rb3+ and Rg3) and wins after Rf2 5. g8Q Rf1 6. Ra2. 2. g8Q We know already that 2. 0-0-0? fails to Rb8 3. Nf8 Rd8! Now White anticipates g1Q+ 3. Qxg1+ Kxg1 4. 0-0-0+! winning; but Black has 2. ... Rc2!! not Rb8?! (trying to get the rook out of harm's way with tempo) because 3. Qxb8 is check, which is why 2. g8R was not sufficient. But with Rc2!! Black stops the castling, and White can do nothing to halt the g-pawn (3. Ra2 Rxa2 4. Qxa2 Kh1, or 3. Qb8+ Kh1, and Nh7 is in the way of Qh8+ while the c6 pawn prevents a diagonal pin with Qa8(d5); 3. Kd1 Rf2 is also useless). And yet... 3. Nf6! g1Q+ (what else?) 4. Qxg1+ **Kxg1 5. Ng4!** and Black's king and rook are caught in a unique domination. White threatens 6. Ne3!, nabbing the rook after Rb2 7. 0-0-0+, Rc3 7. Kd2+, or Rf2(h2) 7. 0-0-0+ Kh2(f2) 8. Ng4+, and Black has no good defense: Rb2 or Rc3 again runs into 6. 0-0-0+ or 6. Kd2+; Kg2 6. Ne3+ or Rc4 6. Ke2(d2)+ Kg2 7. Ne3+ forks king and rook; and Rg2 (or Kh1 6. Ne3 Rh2) runs into the thematic 6. 0-0-0, checkmate!