# The Chess Endgame Studies of Richard Réti : Casualties 

John Beasley, 14 January 2012, latest revision 2 March

A couple of these demolitions are due to my own computer-assisted analysis while preparing this presentation, but I imagine that they have been reported before and I make no claim in respect of priority.

## Pawn studies

No casualties, but one important reinstatement. It was widely reported some years ago that the famous pawn study which is $\mathbf{1 . 1}$ in this collection had been anticipated a few months previously by H. A. Adamson. This is quite false. The Adamson version did not appear until early in 1922 (in the January issue of the Chess Amateur, page 119), and the accompanying text made clear that it was derived from the Réti and was in no sense a forerunner of it .

## Knights and pawns

C. 1 (M 7, 6th Honourable Mention, Shakhmaty, 1929/I, dedicated to Dr Siegbert Tarrasch): White Kb7, Ne4, Pa6 (3), Black Ka5, Nb5 (2), White to play and win. Intention $1 \mathrm{Nc} 5 \mathrm{~Kb} 42 \mathrm{~Kb} 6 \mathrm{Nd} 63 \mathrm{Ne} 4 \mathrm{Nc} 8+4 \mathrm{Kc} 7 \mathrm{~Kb} 5$ $5 \mathrm{~Kb} 7 \mathrm{Ka} 56 \mathrm{Nc} 5 \mathrm{Nd} 6+7 \mathrm{Kc} 7 \mathrm{Nb} 5+8 \mathrm{Kc} 6 \mathrm{Na} 7+9 \mathrm{~Kb} 7 \mathrm{Nb} 510 \mathrm{Ne} 4$ (now we are back at the starting position but with Black to play) Kb4 11 Kb 6 Kc 412 Nc 3 Nd 613 Kc 7 Kc 514 a 7 etc, but the definitive results for $\mathrm{K}+\mathrm{N}+\mathrm{P} v \mathrm{~K}+\mathrm{N}$ now available show that the game can be won without the lengthy lose-a-move manoeuvre; indeed, 2 Nd 7 forces the eventual mate two moves sooner. It has long been a wry joke among composers that to dedicate a composition to somebody is the best possible way of ensuring that it will eventually be proved to be unsound.
C. 2 (M 9, composed 1929 and first published in Mandler's 1931 book): White Kg5, Ne3 (2), Black Kh2, Nf2, Ph 3 (3), White to play and hold the draw. Intention $1 \mathrm{Kh} 4 \mathrm{Kg} 12 \mathrm{Ng} 4 \mathrm{Kg} 23 \mathrm{Ne} 3+\mathrm{Kh} 24 \mathrm{Nc} 2 \mathrm{Nd} 3$ (4...Kg1/Kh1 $5 \mathrm{Ne} 1,4 \ldots \mathrm{Kg} 25 \mathrm{Ne} 3+$ ) $5 \mathrm{Kg} 4(5 \mathrm{Ne} 3 \mathrm{Nf} 46 \mathrm{Ng} 4+\mathrm{Kg} 2$ and we have an equivalent position to that in C. 1 after 1 Nc 5 ) Ne5+ $6 \mathrm{Kh} 4 \mathrm{Nf} 3+7 \mathrm{Kg} 4 \mathrm{Ng} 58 \mathrm{Ne} 1(8 \mathrm{Kxg} 5 \mathrm{Kg} 19 \mathrm{Nd} 4 \mathrm{Kf} 2$ leads to a Black win) Kg1 $9 \mathrm{Nf} 3+\mathrm{Kg} 210 \mathrm{Nh} 4+\mathrm{Kf} 211 \mathrm{Nf} 3$, the point being that the attacking side's knight is worse placed than in C. 1 and gets in the way of its own king. However, the definitive results for $\mathrm{K}+\mathrm{N}+\mathrm{P} v \mathrm{~K}+\mathrm{N}$ show an elegant alternative by $5 \mathrm{Nd} 4 \mathrm{Kg} 26 \mathrm{Nf} 3 \mathrm{Ne} 57 \mathrm{Ne} 1+\mathrm{Kh} 28 \mathrm{Nc} 2$, returning to the position after 4 Nc 2 with the unimportant difference that the Black knight is now on e5 instead of f 2 . Am I being harsh in relegating the study to the casualties on account of such an alternative? Perhaps, but to include it would invite comparison with the magnificently accurate $\mathbf{5 . 1 0}$ where White has to play exactly the correct move right through to the end.

## Bishops and pawns

C. 3 and C. 4 have been corrected (see 3.7 and 3.8).

## Rooks and pawns

C. 5 (M 23, 28. říjen, 1 August 1925): White Kb4, Rh8, Ph7/c3 (4), Black Ke3, Re7, Pb6/f5 (4), White to play and win. Intention 1 Kb 5 f 42 Kc 6 ( $2 \mathrm{Kxb6} \mathrm{f} 33 \mathrm{Kc} 6 \mathrm{f} 24 \mathrm{Rf} 8 \mathrm{Rxh} 7$ ) Kf2 3 Kxb6 f3 4 Kc6 Rf7 5 Kd6 Rf6+ $6 \mathrm{Kd} 5 \mathrm{Rf} 5+7 \mathrm{Ke} 6 \mathrm{Rh} 58 \mathrm{Kd} 6 \mathrm{Rh} 6+9 \mathrm{Kc} 5 \mathrm{Rh} 5+10 \mathrm{~Kb} 4$, with a note that 6 Ke 5 is met by $6 \ldots \mathrm{Rf} 77 \mathrm{Ke} 6 \mathrm{Rc} 7$ 8 Kd6 Rf7 $9 \mathrm{c} 4 \mathrm{Rf} 6+10 \mathrm{Ke} 5 \mathrm{Rf} 711 \mathrm{Ke} 6 \mathrm{Rc} 712 \mathrm{Kd} 6 \mathrm{Rxc} 4$. However, $12 \mathrm{Kd6}$ in this line merely throws away a pawn to no purpose, and my computer wants to play 12 Kd 5 instead with a quick win (its best-play line starts 12...Rd7+ 13 Kc6 Rf7 14 c5 Kf1 15 Kb6 f2 16 c6 Ke2 17 Re8+ Kd3 18 Rd8+ Kc2 19 c7). Yakov Konoval, having checked the position in his and Marc Bourzutschky's preliminary results for $\mathrm{K}+\mathrm{R}+2 \mathrm{P} v \mathrm{~K}+\mathrm{R}+\mathrm{P}$ for me, confirms this with a note that 18 h 8 Q also wins, and draws attention to many further alternative winning moves for White along the intended main line, most of them winning as quickly as or even more quickly than the intended solution (having played to 10 Kb 4 , White still has to clinch the win with $\mathrm{K}+\mathrm{R}+\mathrm{P} \mathrm{v} \mathrm{K}+\mathrm{R}$ after 10...Kf1 11 Rf8 Rxh7 12 Rxf3+, though it won't be difficult because the rook will cut the Black king off from the pawn). Yakov and Marc's preliminary results for $\mathrm{K}+\mathrm{R}+2 \mathrm{P} \mathrm{v} \mathrm{K}+\mathrm{R}+\mathrm{P}$ were calculated under the simplifying assumption that promotion was possible only to queen or knight, but this isn't a situation in which the defender will be able to save himself by underpromoting to a rook or bishop.

## Knights and bishops

C. 6 (M 30, composed in 1929 and first published in Mandler's 1931 book): White Kh7, Bd7, Pg6/g2 (4), Black $\mathrm{Kf} 8, \mathrm{Bg} 7, \mathrm{Nc} 4$ (3), White to play and hold the draw. Intention 1 g 3 Ne 52 Bg 4 and $2 \ldots \mathrm{Nxg} 4$ will be stalemate, but Harold van der Heijden's "Endgame study database IV" reports busts by $1 . .$. Nd6 and mate by move 7 at the latest (attributed to AF) and by $2 \ldots$ Nc6 and mate by move 11 at the latest (attributed to RK). The latter, at least, seems irreparable, assuming that the stalemate by $2 \ldots \mathrm{Ng} 4$ is a primary objective of the study; if the knight is placed on any other square giving access to g 4 , Black has a much quicker mate.
C. 7 (M 39, Shakhmaty, 1927, correction): White Ke5, Bf8, Pc7/e6 (4), Black Kc8, Bh5, Nh4 (3), Black to play but White to hold the draw. Intention 1...Ng6+ and not $2 \mathrm{Kf6} \mathrm{Nxf8}$, when White is in zugzwang, but $2 \mathrm{Kf} 5 \mathrm{Nxf8}$ $3 \mathrm{Kf6}$ and now it is Black who is in zugzwang: $3 \ldots \mathrm{Kxc} 74 \mathrm{Ke} 7 \mathrm{Nh} 7$ stalemate. However, while this is sound enough, it is rather static and clumsy, and the finale had been anticipated by Kubbel a few years earlier (Shakhmaty 1923): White Kd7, Pb5/d5 (3), Black Kf7, Bc7, Na8 (3), draw by 1 d6 Ba5 2 b6 Nxb6 3 Kc6 Nc8 4 Kd 7 Na 7 stalemate. So only the reciprocal zugzwang after 3 Kf 6 was Reti’s, and given the rather crude way in which this is achieved (the capture of an unmoved White bishop to force the knight to f8, and the use of the pawn on c7, also captured unmoved, to prevent a Black waiting move by ...Kb7 or ...Kb8) I don't think he would have wanted the study to stand in the collection. According to Kalendovský, the anticipation was first noted by Vladimirov and Fokin. Réti's original setting, much richer in content, had White Ke8, Be7, Pc7/f7/e6 (5), Black Kc8, Bg4, Ng6/e5, Pf6 (5), draw intended by 1 f8N Nxf8 2 Bxf8 Bh5+ 3 Ke7 Ng6+ etc, but 1...f5 and 3...Ng4 both led to Black wins.

## Rooks and minor pieces

C. 8 (M 32, Tagesbote, 1928): White Kf6, Nf8, Pe6/d3 (4), Black Kc8, Rd6 (2), White to play and win. Intention 1 d 4 Rxd4 2 e $7 \mathrm{Rd} 6+$ and not 3 Kf 7 Rd 8 drawing but 3 Kg 7 Rd 84 Kf 7 winning. However, the position after 1...Rxd4 had been previously shown by M. F. Palmer, Iowa News, 1917 (Kalendovský reports this anticipation as first having been reported by Walter Korn), and the move $1 \ldots \operatorname{Rxd} 4$ is unexpectedly but greatly inferior to $1 \ldots$ Kc7. Harold van der Heijden's "Endgame study database IV" even gives $1 \ldots$ Kc7 2 d5 Ra6, which it credits to " $Z$ ", as a cook; it isn't quite that, but it makes the win very much more difficult than the main line move $1 \ldots \mathrm{Rxd} 4$ does, and a subsidiary Black move requiring a disproportionately difficult refutation destroys a study's aesthetic effect. So the first move must come off, and everything thereafter is anticipated.
C. 9 has been corrected (see 6.8).
C. 10 (M 34, Shakhmaty, 1929): White Kg5, Nf4/b2, Ph7 (4), Black Kc3, Rd8, Pc7 (3), White to play and win. Intention $1 \mathrm{Na} 4+\mathrm{Kb} 42 \mathrm{Ng} 6 \mathrm{Kxa} 4$ ( $2 \ldots \mathrm{c} 53 \mathrm{Kf6} \mathrm{c} 44 \mathrm{Ke} 7 \mathrm{Rc} 85 \mathrm{Nb} 6$ ) $3 \mathrm{Kf6} 554 \mathrm{Ke} 7$ followed by 4...Ra8/Rc8 $5 \mathrm{Nf} 8 \mathrm{Ra} 7+/ \mathrm{Rc} 7+6 \mathrm{Nd} 7 \mathrm{Ra} 8 / \mathrm{Rc} 87 \mathrm{Nb} 6+$ or $4 \ldots \mathrm{Rb} 85 \mathrm{Nf8} \mathrm{Rb} 7+6 \mathrm{Nd} 7$. But my computer plays $3 \ldots \mathrm{Rb} 8$ in the line $2 \ldots \mathrm{c} 5$, and after $4 \mathrm{Nb} 2 \mathrm{Kc} 35 \mathrm{Nd} 1+(5 \mathrm{Na} 4+\mathrm{Kb} 4$ repeating $) \mathrm{Kd} 4$ it appears impossible for White to make progress. 6 Kf 7 makes no immediate threat ( 7 Nf 8 will be met by $7 \ldots \mathrm{Rb} 7+$ etc), and allows Black to push forward with his c-pawn; 6 Ke 7 and 6 Kg 7 allow $7 \mathrm{Rb} 7+$ etc at once; and 6 Ne 7 (for 7 Ng 8 ) allows $6 \ldots \mathrm{Rh} 8$. In most cases, White can answer Black's eventual ...Rxh7 by taking the rook, but it doesn't help; $\mathrm{K}+2 \mathrm{~N}$ win against $\mathrm{K}+\mathrm{cP}$ only if the knights can securely blockade the pawn on a square no further forward than c 4 , and here the pawn will quickly advance to c 3 .
C. 11 (M 51, Tijdschrift v. d. NSB, 1924, version): White Kg2, Rf1, Nd4, Pe6 (4), Black Ka5, Re4, Bh2, $\mathrm{Pa} 7 / \mathrm{h} 7 / \mathrm{g} 4 / \mathrm{g} 3$ (7), White to play and win. A more complicated essay on the theme of 6.5 and 6.6 , with intention 1 e7 h5 (1...Re3 2 Ra1+ Kb6 3 Nf5 Re2+ 4 Kf1 Re6 5 Nd6 etc, 1...Kb4 2 Re1 Rxe1 3 Nc2+) 2 Rf5+ Kb6 (2...Ka4 3 Rf4 with 3...Rxf4 4 e8Q+ or $3 \ldots$ R $\sim 4$ N+, 2...Kb4 3 Nc6+ with 3...Kc4 4 Re5 Rf4 5 Re1 h4 6 Ne5+ and 7 Nxg4 or $3 \ldots$ K K $\sim 34$ Re5 Rf4 5 Re3+ K~ 6 Rxg3 Ke4 7 Kxh2 etc) 3 Rf6+ Kc7 4 Ne6+ with 4...Kb6/Kd6 $5 \mathrm{Ng} 5+$ or $4 \ldots \mathrm{~Kb} 7 / \mathrm{Kd} 75 \mathrm{Nc} 5+$. However, the given answer to $1 \ldots$ Re3 can be met by $5 \ldots \mathrm{~g} 2+$ and $6 \ldots \mathrm{Bxd} 6$, and nothing better is apparent. I have no idea whether this can be rescued, but its clumsy setting seems so much inferior to that of its fellows that I see little reason to regret its loss.

## Queens

C. 12 (M 53, Commendation, Magyar Sakkvilág, 1929): White Kc7, Rg1, Na3, Pe6/a5 (5), Black Kc3, Qb2, Ph6 (3), White to play and win. Intention 1 e $7 \mathrm{Qh} 2+2 \mathrm{Kc} 6$ with $2 \ldots \mathrm{Qe} 23 \mathrm{Nb} 5+$ or $2 \ldots \mathrm{Qe} 53 \mathrm{Rg} 3+\mathrm{Kb} 44 \mathrm{Nc} 2+$ Kc4 $5 \mathrm{Ne} 3+$ followed by $6 \mathrm{Nd5}+$ or Nf5+ and 7 Re3. However, Harold van der Heijden's "Endgame study database IV" gives a bust, credited to MG, in which Black plays $5 \ldots \mathrm{Kd} 4$ in the $2 \ldots$ Qe 5 line, with sequel $6 \mathrm{Nf} 5+$ Qxf5 7 e 8 Q Qd5+ $8 \mathrm{~Kb} 6 \mathrm{Qd6}+9 \mathrm{Qc} 6 \mathrm{Qb} 8+10 \mathrm{Ka} 6 / \mathrm{Qb} 7 \mathrm{Qxg} 3$. No further details are given, but the point would appear to be that Black can either force a perpetual check or pick up the unguarded rook and come down to a drawn ending with a queen and a pawn on each side.

