

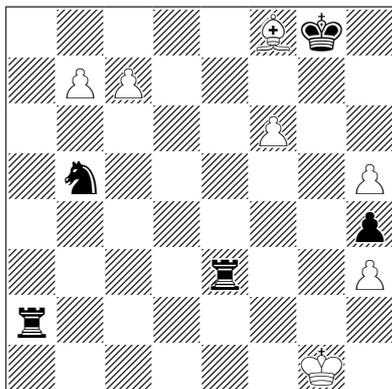
Endgame studies : an exercise in frustration?

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The aim of this article is to look at a few aspects of the study world from the view of the otb player. If studies are to be popularised amongst otb players, it is important to take their views into account, and this article may be viewed as a small contribution to the discussion.

I was first attracted to endgame studies in my youth, and over the years my feelings towards them have fluctuated. At times I have enjoyed endgame studies, but at other times I have felt so frustrated by the endgame study world that I have turned my back on studies, only to return some years later. Recently, I have become interested in problem-solving competitions and for training purposes I have been solving a fair number of endgame studies. I adopt a simple technique, choosing a study from a readily available source (*FIDE Album* or *EG*) and giving myself 30 minutes to solve the study. This has been an enormously frustrating experience for one simple reason: unsoundness. I will give a few examples from many, chosen to illustrate typical problems.

[797] N1 D.Gurgenidze
3rd Prize 64 1987



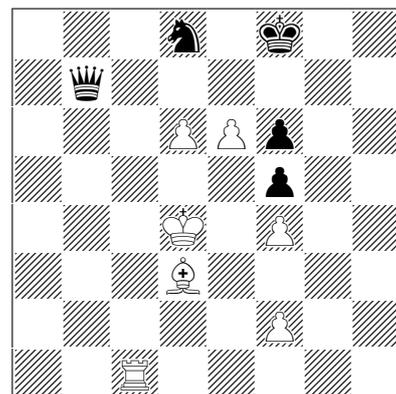
g1g8 0613.51 7/5 Win

You will find this study as D75 in *FIDE Album 1986-88*. Black is threatening mate in

one, and 1.Kf1? loses to 1...Sd4, followed by 2...Ra1+ and 3...Re2#, so there is no choice: **1.Bb4 Rg3+ 2.Kf1 Rf3+** (2...Ra1+ 3.Be1) **3.Ke1** and now the check on a1 looks promising, since Ke2 may be met by ...Sd4+. Sure enough, after 3...Ra1+ 4.Kd2 (4.Ke2? leads to a quick mate after 4...Sd4+ 5.Kd2 Ra2+ 6.Kd1 Rd3+) 4...Ra2+ 5.Ke1 (5.Kd1? Rf1+ 6.Be1 Sc3+ mates) 5...Ra1+ Black gives immediate perpetual check. I searched for other ideas, but the whole line seemed totally forced. Giving up, I looked at the solution, but 3...Re3+ was the only move mentioned. The otb player knows 'always look at checks and captures', and in this case it led to the discovery of a simple bust.

[798] N2 N.Kralin

1st Prize *Moscow Championship* 1986



d4f8 3113.42 7/5 Win

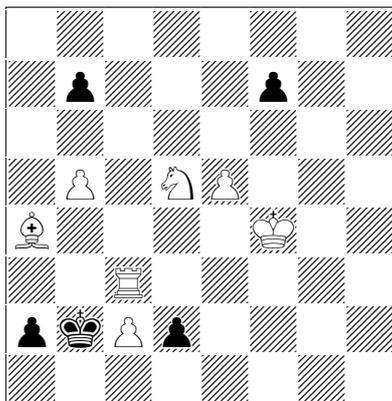
This is D76 in *FIDE Album 1986-88* (i.e., the one after the previous study). The first few moves seemed clear enough: **1.e7+ Ke8 2.Rc8 Qxc8 3.Bb5+ Sc6+**. Now there is a choice as to whether to play 4.Kd5 or 4.Kc5. It seemed to me that 4.Kc5 Kd7 left White short of a waiting move, since I assumed that for some reason White did not want to play f3. I therefore tried **4.Kd5 Kd7 5.Kc5**, but now I couldn't see any defence for Black. The only

moves to retain control of c6 are 5...Qb7 and 5...Qa8, but then 6.e8Q+ seemed to win. It was about 10 minutes before I realised that 5...Qa8 6.e8Q+ Qxe8 7.Bxc6+ Ke6 8.Bxe8 is stalemate, and then the situation was turned around: I couldn't see any hope of White winning. I went back to look at 4.Kc5 and some other ideas, but nothing worked and by then the half-hour was up. I looked at the solution and found that it gave 5...Ke6 6.Bxc6 Qb8 7.Kc4 and an eventual win for White. No mention of 5...Qa8!, even though it's the most obvious move since it continues to defend the knight. In fact the study is just unsound: Black's most natural defence was apparently not considered.

More time wasted. Having been disappointed by D75 and D76, I decided to try solving D77.

[799] N3 V.Nestorescu

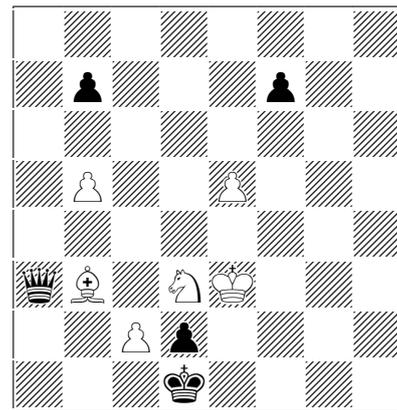
1st Prize *Buletin Problemistic* 1986



f4b2 0111.34 7/5 Win

Here things started off a bit better. After **1.Rb3+ Kc1 2.Sb4 a1Q 3.Sd3+ Kd1 4.Rb1+ Qxb1** White must decide whether to play 5.Kf3 or 5.Ke3. This is quite a tricky point; after 5.Kf3? Qa1 6.Bb3 Qc3 7.Ke3 b6 8.Kf3 Qxb3 9.cxb3 Kc2 10.Sf2 Kxb3 the position is in fact drawn, although you need to think about it a bit to convince yourself of this. White needs to have his pawn on b6 to win in this line, and so **5 Ke3 Qa1 6.Bb3** is correct, since now 6...Qc3 7.b6 Qxb3 8.cxb3 Kc2 9.Sf2 Kxb3 10.Kd4 Kb4 11.Kd5 leads to a win. Therefore Black tries 6...Qa3 instead, with the following position.

[800] N4 V.Nestorescu



e3d1 3011.33 6/5 Win

This is another crucial point for White, since he must choose between 7.b6 and 7.Kf3. I analysed these lines:

1) 7.Kf3 b6 8.Ke3 f5 9.e6 f4+ 10.Kf2 (10.Kf3? Qa8+ 11.Kf2 Qf3+ 12.Kxf3 stalemate) 10...Qxb3 11.cxb3 Kc2 12.Se1+ (12.e7? Kxd3) 12...Kc1 13.e7 d1Q 14.e8Q wins, as White is a piece up and keeps the b5-pawn.

2) 7.b6 f6 8.e6 f5 and now White seemed to be able to win by 9.Kf3 f4 10.e7 or 9.Kf2 Qxb3 10.cxb3 Kc2 11.Se1+ Kc1 12.e7 d1Q 13.e8Q (similar to line 1).

Confusion. Two or even three lines apparently win for White. Had I overlooked a better defence for Black earlier? I struggled for a few minutes but then the half-hour was up and I looked at the solution. I discovered that the solution made no mention of Kf2 in either line and only gave the weak 10.Kf3? in line 1, which allows an immediate stalemate.

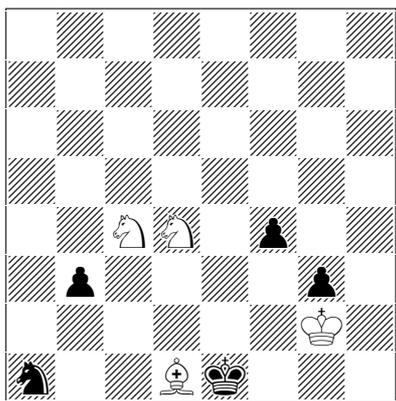
Three unsound studies in a row is not a good record.

I must emphasise that otb players are interested in **solving** studies; they don't care to have the solution shown to them, although they may appreciate a hint if they get stuck. For solving to be a rewarding experience, the study must be sound. If a player fails to solve a correct study then he accepts it; it's like losing a game, not very pleasant but part of life. But failing to solve a study because it is incorrect raises the blood-pressure; it is like the opponent winning by cheating, or somebody laughing at you for struggling at a task which is in fact impossible.

Note that these studies are not fresh from the composer. They were awarded prizes in study tourneys and were then selected for the *FIDE Album* (with four judges!). So they have been through what should have been an arduous selection process, but alas they are still unsound, in two cases very obviously so.

Ah, you might say, that was many years ago, but now everybody has computers so such errors will be found and eliminated. First of all, in the first two cases you hardly needed a computer to find the flaw; secondly, the 1986-88 FIDE Album was published in 1995, which was not so long ago; finally, don't believe that similar errors can't occur today.

[801] N5 P.Arestov
3rd Prize *Mosdow Town toruney* 1996



g2e1 0015.03 4/5 Win

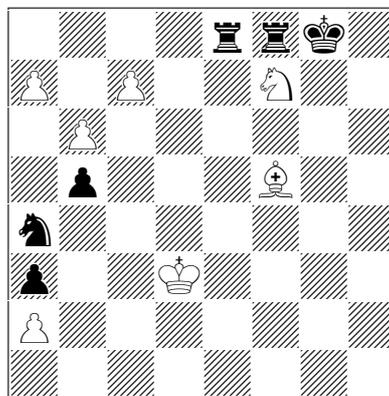
This is D19 in the *Annexe* to the 1995-97 *FIDE Album*. My first reaction was of bafflement. White is two pieces up and all Black's pawns are blockaded, so at first sight it should be an easy win. This first impression was quickly backed up by some concrete lines, such as 1.Bh5 Sc2 and now 2.Sf3+ Kd1 (2...Ke2 3.Sfe5+ mates) 3.Sfe5+ Kc1 4.Sd3+ Kb1 5.Sd2+ Ka2 6.Bf7 Sd4 7.Sxb3 Sxb3 8.Sc1+ with an easy win, or 2.Se6 Se3+ 3.Sxe3 fxe3 4.Sc5 b2 5.Sd3+ Kd2 6.Sxb2 e2 7.Sc4+ Kd3 8.Se5+ Kd2 9.Sf3+ Kd1 10.Sd4 and again Black can give up. Not only did there appear to be multiple wins after 1.Bh5, but these wins work equally well after 1.Bg4. The only way I could see for White to go wrong was by 1.Bh5 Sc2 2.Sxb3 f3+ 3.Kxf3 g2 4.Se5? (in fact, White can still win here by 4.Sc1! Kf1 5.Sd2+ Ke1 6.Se4 Kf1 7.Sg3+

Kg1 8.Sc2+ Kh2 9.Bg6, a line I discovered later when I was checking the analysis with *Fritz*) 4...Sd4+ 5.Kxg2 Sxb3 6.Sf3+ Kd1 7.Sd4+ Ke1 8.Sxb3 stalemate. I thought this might have something to do with the composer's intention, but I couldn't get round the fact that the diagram position is a clear technical win. Time to look at the solution; imagine my astonishment when the line leading to the stalemate was given as the main line, stopping at 7.Sd4+ just one move before the stalemate! It is indeed ironical when virtually every position given in the composer's solution is an easy win, except for the one at the end of his main line.

To be fair, the level of unsoundness in the main 1995-97 FIDE Album seems rather lower than in previous Albums, so perhaps the use of computers is having a beneficial effect, although there is still some way to go.

Finally, we come to a real mess.

[802] N6 N.Rezvov & S.N.Tkachenko
2nd/3rd Prize *Chekhover-90MT* 1999



d3g8 0614.42 7/9 Draw

This is 14071 in EG 153. Just the sort of position I hate to get in solving tourneys (which is why I chose it for practice!) – a total mess in which there is no obvious logic. In such cases one can only proceed in the same way as in an otb game; make a list of candidate moves and analyse them one by one. I thought 1.c8Q, 1.Sd6 and 1.b7 were possibilities. I first looked at 1.c8Q Rxc8 2.Bxc8, which seemed to lead to a draw after 2...Sxb6 3.Sd6 Rd8 (or else Kd4, etc.) 4.Kd4 Rxd6+ 5.Kc5 Rh6 6.Bb7 followed by a8Q+ or 2...Rxc8 3.Sd6 Ra8 4.b7 Sc5+ 5.Kc3 Sxb7 6.Sxb7 Rxa7 7.Sd6. In both

cases Black will end up without any pawns. Then I turned to 1.Sd6, which looked even better. After 1...Sxb6 2.Sxe8 Rxe8 3.c8Q Rxc8 4.Bxc8 or 1...Ra8 2.c8Q Rfxc8 3.Sxc8 Sxb6 4.Sxb6 Rxa7 5.Kc3 it seemed unlikely that Black would even make a draw. My remaining minutes didn't add anything substantially new, so I turned to the solution. Neither 1.c8Q nor 1.Sd6 was mentioned, but it was obvious that something was wrong, as the given solution started 1.b7 Sc5+ 2.Kc4, which is illegal. I wrote the whole thing off as a mistake in the diagram, which is just as annoying as a faulty study. In EG 154, I read that the pawn on b5 should be on b4, which invalidates the 1.c8Q line (Black has ...Rc3+ at some point), but 1.Sd6 was still an almost certain win for White (in a draw study, remember!). The same point was made in the Spotlight column in EG154. Here we have a particularly unfortunate combination; the diagram was wrong and the study was unsound in any case. It may in fact be that the flaws in some of the earlier studies are the result of diagram errors, but so far as I am aware the positions are as intended. In any case, the diagrams given above were those presented to the chess public.

Both these latter two studies are well within the computer age, and the problems which I discovered by hand are spotted within a few seconds by any of the usual chess engines, so something is clearly going wrong. As further evidence of the continuing high level of unsoundness, I quote from recent tourney reports in EG, "...many faults and anticipations" (EG154, p.359), "...43 studies were published ... 21 were demolished" (EG155, p.413), "...over half the entries were defective" (EG156, p.467). At least in these cases, the judge has apparently been doing his job; more worrying are the cases in which large numbers of unsound studies aren't detected!

To someone from the otb world, where it is almost inconceivable to work without a computer, all this is astonishing. One would imagine that these days almost all composers have access to a computer to check their analysis, but for some reason composers are not doing

this. There is in fact little to be done about composers submitting unsound studies, if only because there is no realistic sanction one can take. However, it is a different matter when it comes to judges. In the past, judges could be forgiven for overlooking analytical problems, especially if a large number of studies are involved, because testing by hand is very time-consuming. Moreover, judges may not necessarily be strong players. These days, chess engines are very powerful and can cut down the work enormously. There will still be some studies which need hand-testing since the computer cannot cope with every type of position, but the vast bulk of the checking work can be automated. However, the regular Spotlight feature in EG highlights a long list of analytical problems in virtually every issue, and these are in studies which have already appeared in an award. This is in itself disturbing, but that clearly faulty studies should find their way into FIDE Albums (with four judges!) beggars belief. It is hard to understand why the level of soundness remains stubbornly high. I realise that judges and others in the study world are voluntary workers, giving up their time for no financial reward, but this really doesn't excuse such a poor job being done. In my view no-one should be a judge (for a tourney and especially a FIDE Album) unless he or she has computer and database access.

Unsoundness is the single greatest problem in the study world, to a considerable extent blighting the whole field and often rendering the whole solving experience joyless. The tools are there to attack the problem, but they are apparently being ignored.

On another matter, diagram errors can perhaps never be entirely eliminated, but they should be very, very rare. Chess is fortunate in that it has a universal language for the exchange of chess information, namely the PGN format which can be read and written to by any number of chess tools, both free and commercial (such as *Fritz* and *ChessBase*). PGN files can be e-mailed, and diagrams can be made automatically from PGN files. The scope for errors to creep in is therefore much

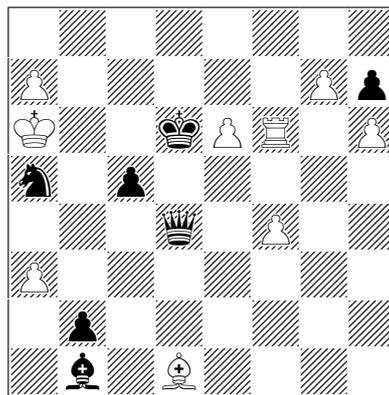
less than in the days when a great deal of manual work was involved in preparing diagrams.

I believe that otb players are generally well-disposed towards studies, but there are several caveats. Otb players like studies which can be understood without obscure analysis, have few pieces, a single main variation and a pointed solution. Quite a few studies published today look like a middlegame position from a game between two madmen; whatever the content of the study, such a position will never be appealing to otb players. The fact that otb players lean towards lightweight studies inevitably raises the question of database-assisted composition (in which the position itself, or a key position in the main line, can be looked up in a database). To my utter amazement, this question seems to have provoked some controversy in the study world. Space precludes a lengthy discussion, so I will just give my simple and logical solution: all studies, however composed, should be considered on an equal footing. End of problem. Database-assisted studies are much more likely to be sound than normal studies (and are guaranteed to be so from a certain point in the solution) which also helps tackle the crucial problem of unsoundness. Here it would help for the study world not to forget its roots in the otb endgame and to give due emphasis to the principle of economy.

Perhaps some readers might find this a bit abstract, so I would like to give two examples of recent studies which, in my opinion, offer the worst and best of contemporary study composition.

You may find N7 as No.14394 in EG156. The grotesque position, with three miraculously unpromoted pawns on the seventh rank, is immediately off-putting. It is hard to take an interest in the play from such a position, but the composer's intention runs 1.e7+ Qxf6 2.e8S+ Ke7+ 3.Sxf6 Bd3+ 4.Kxa5 b1Q 5.g8S+ Kf7 6.Bh5+ Ke6 7.Bg4+ Kf7 with perpetual check. In the introductory play, pieces are hacked off the board with all the subtlety of a barbarian swordsman. Two knight promotions (not bad in themselves)

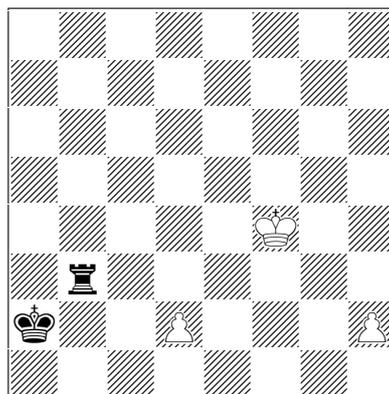
[803] N7 A.Pallier
2nd honourable mention *Phénix* 1994-6



a6d6 3143.63 9/7 Draw

lead to a not especially interesting perpetual check. Unfortunately, in this draw study, White wins rather comfortably by 5.Sd5+ Kd6 6.Sb4; for example, 6...Qb2 7.Sxd3 Qxa3+ 8.Ba4 Qc3+ 9.Kb6, etc.

[804] N8 H.van der Heijden
Prize *Rozlov-40 JT* 2003



f4a2 0300.20 3/2 Draw

The obvious move is 1.h4?, but this fails to 1...Rh3 2.Kg5 Kb3 3.h5 Kc4 4.h6 Kd5 5.Kg6 Ke6 6.Kg7 Ke7 (this is a well-known theoretical draw without the d2-pawn) 7.h7 Rg3+ 8.Kh8 (8 Kh6 Kf7) 8...Kf7 and there is no stalemate, so Black mates. Then you start trying less obvious ideas, such as 1.Kg4? Rb1 2.h4 Kb3 3.h5 Kc4 4.h6 Rh1 5.Kg5 Kd5 winning or 1.d4? Rh3 2.d5 Kb3 3.d6 Kc4 4.Ke5 Kc5, with an easy win for Black in both cases. Finally, the idea of 1.d3! arises. Amazingly, there is nothing better than 1...Rxd3 (1...Rb1 2.h4 Rh1 3.Kg5 draws as the black king has no access to c4) 2.h4 Kb3 3.h5 Kc4 4.h6 (4.Kf5 Rh3 5.Kg6 is also possible) 4...Rh3 5.Kg5 Kd5 6.Kg6 Ke6 and now the standard

draw is played out: **7.Kg7 Ke7** (7...Rg1+ 8.Kf8) **8.h7 Rg3+** **9.Kh8**. This could have been composed by Réti; it is economical, surprising, pleasant to solve and instructive. Perhaps the composer extracted this by some means from a database, but who cares? A masterpiece is a masterpiece, whatever the technique of the artist.

Finally, why does everything in the study world happen at a snail's pace? Tourneys

sometimes drag on for years, with the judge finally rendering his verdict after an interminable wait. There then follows another delay until publication, only for claims of unsoundness to further postpone the final award. Come on, guys, this is the Internet age, where information can zip from one side of the planet to the other in a fraction of a second – let's speed things up a bit!



Eretria 2005: Solver John Nunn