

### Request to Authors of Chess Programs

In my experience there are many interesting and suitable scientific experiments that can be carried out on commercial chess computers or chess programs. (In the sequel I will speak of computers only, but meaning both.) During my own investigations I have learned that the following features support (or would support) such experiments:

- A) Adjustable levels of play:
- (i) fixed depth of search;
  - (ii) fixed thinking time per move;
  - (iii) autoplay mode, where the levels of play can be adjusted separately for the two sides (for instance depth  $n$  for White, depth  $n-2$  for Black).
- B) "Next-best" function: after having computed the "best" move for a position, the computer can be forced also to compute the "second best", "third best", and so on, move in that position. (The programs of Richard Lang already have this option.)
- C) The option to switch off the following features:
- (i) retaining principal variations;
  - (ii) hash tables;
  - (ii) opening books.

Whereas several commercial chess computers already allow A(i) and C), the other functions are typically missing in current machines. Probably (and especially for my experiments) it would be a good thing if the authors implemented them in their future programs.

## CHESS COMPUTERS AND ENDGAME STUDIES 1

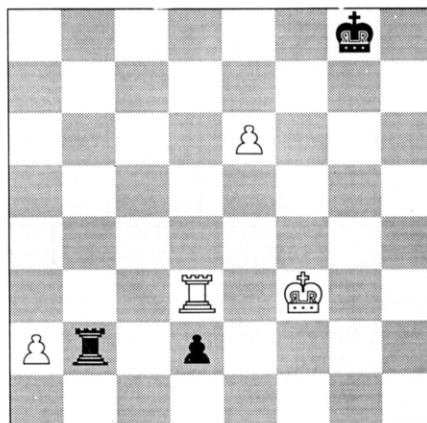
*Ken Whyld*

Moorland House  
Caistor  
Lincoln LN7 6SF  
England

Brian Gosling's contribution to the March issue of the *ICCA Journal* (Vol. 15, No. 1, pp. 19-23) is essentially the same as his article in the March issue of *Chess*, and I sent the two comments below to that magazine some months ago.

- 1) There was no need to correct the Korolkov study. The composer himself did so, finally producing this position, which won 2<sup>nd</sup> prize in a tourney in Uzbekistan in 1954.

After 1. Rd8+ Kg7 2. e7 d1=Q+ 3. Rxd1 Kf7 4. Re1 Ke8 5. a4 the same position is reached as after White's third move of the composer's solution to Diagram 3 given on page 20.



- 2) Gosling is right to doubt if the solution to study 3 on page 21 was by Hey. The position first appeared in *Deutsche Schachzeitung*, January 1913, and is based on a consultation game played in Neuburg. Hey drew attention to the fact that it is impossible for White to win in this position – exactly the contrary of the claim attributed to him by Gosling.

## CHESS COMPUTERS AND ENDGAME STUDIES 2

Wlodek Proskurowski

Department of Mathematics  
University of Southern California  
Los Angeles, CA 90089-1113

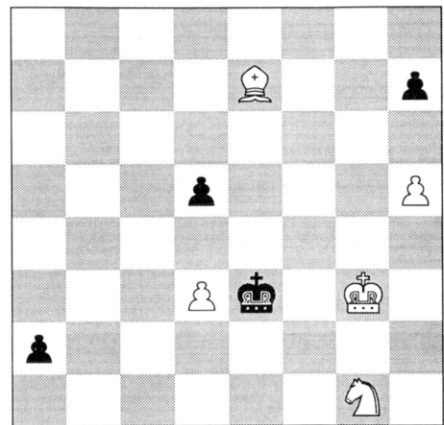
This letter refers to "Chess Computers and Endgame Studies" by Brian Gosling that appeared in the latest *ICCA Journal* (Vol. 15, No. 1, pp. 19-23).

The author, or his source (Livshits/Speelman), makes a factual error (actually, two).

1. It is not No. 1 but the following endgame that won the 3<sup>rd</sup> tourney in *Rigaer Tageblatt*:

V. & M. Platovs, *Rigaer Tageblatt*, 1909

1. Bf6 d4 2. Ne2! a1Q 3. Nc1!! Qa5 4. Bxd4+

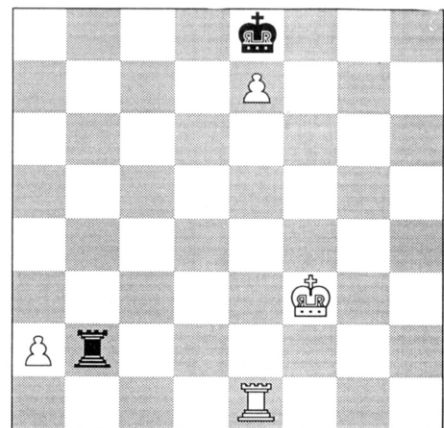


2. Such an authoritative source as *Sovetsky Shakhmaty Etyud* (Kazantsev, Kofman and Liburkin, eds.), 1955, pp. 19-20 attributes the last one as the favorite of Lenin.

Another problem arises with endgame No. 2. It must have been well-known (again the source's fault, I suppose) that the study is cooked as the *Encyclopedia of Chess Endings (ECE)* contains not No. 1 but (apparently) a corrected version of it:

V. Korolkov, 1952  
[*ECE*, v. 2, 1985, No. 621]

1. a4 Rb3 2. Kg2! Rb2 3. Kh1! Rb4 4. a5 Rb5 5. a6 Rb6 6. a7! Ra6 7. Rg1! Kxe7 8. Rg8 Rxa7 9. Rg7+ wins.  
1. ... Rb7 2. a5 wins.



Obviously, the 1952 Korolkov correction is much preferable to Diagram 4 that misses the original idea.

Also the endgame No. 3 by Hey (1913) is followed by the task: "Anzug beliebig. Remis" in *Lehr- und Handbuch der Endspiele* by André Chéron, Band II, 1952, No. 1092. I don't know the Livshits/Speelman book but its record for accuracy based on these three examples leaves something to be desired.

Finally, the conclusions are far too optimistic. Perhaps Livshits/Speelman contains many endgames with shallow solution trees (try solving most positions from *The Art of Analysis* (in Russian) by Dvoretsky using a computer!). If the depth is more than 12 plies then even a week-long analysis on commercial computers of today will not help you.

## CHESS COMPUTERS AND ENDGAME STUDIES 3

*Brian Gosling*

36 Westwood Drive  
Frome  
Somerset  
BA11 4JR England

I would like to thank Ken Whyld and Wlodek Proskurowski for their keen interest in my article "Chess Computers and Endgame Studies". As they both mention the Korolkov Study and the Hey study I will deal with their comments together.

**Study No. 1:** V. and M. Platov, 1908.

This study is not the prize winning study which was a favourite with Lenin. I did not wish to imply this when writing the article. I thought this was reasonably clear and I was only comparing them because of the role the Knight played in each position.

**Study No. 2:** V. Korolkov, 1948.

It is a mixed blessing to find that there are further corrections to the 1948 study. The position that Ken and Wlodek quote are essentially from the same study. Ken gives the initial position and the early moves to 5. a4. This is the move that the study in *Encyclopedia of Chess Endings (ECE)* starts with but both positions are from the 2<sup>nd</sup> prize winner in Uzbekistan in 1954. It confirms my earlier result that the 1948 study was indeed flawed. If I had known about the correction I would not have added my own. I agree with Wlodek that my correction is not as creative as the Korolkov's but it shows that the original 1948 position is drawn. This was the idea I wanted to convey to my readers.

As I understand it no one has a monopoly for a correction. If Korolkov were alive I would have made efforts to contact him. In passing, let me state that most composers have been extremely helpful in my work and do not seem to be threatened by my computer analysis.

**Study No. 3:** F. Hey, 1913.

I'm grateful to both writers for the information on what Hey really understood about this position. This correction along with others is incorporated in the 1992 edition of *Test your Endgame Ability* by Livshits/Speelman (Batsford). To be fair to the authors, there are over 500 studies in this book. One would not expect every study to be free from errors.

Finally I would like to deal with Wlodek's comment that my conclusions are too optimistic. **I stand by my conclusions.** New techniques are being developed all the time in both programming and increasing computer speeds. It was the development in the RISC technology which has led to new heights of achievement. By the year 2000 computer analysis would have solved all Endgame studies.

## KLING-HORWITZ POSITIONS

*John Roycroft*

17 New Way Road  
London  
England NW9 6PL

Just one point arising from the extensive *ICCA Journal* article on Timman vs. Speelman [Vol. 15, No. 1, pp. 28-39]. The comment after 72. Bd6 reads "This position resembles the fourth exit ...". Well, a position either *is* an 'exit' or it isn't. Possibly there is a fifth (or even more) beyond the four identified in 1985, but this has yet to be demonstrated. Optimal lines from the position after 72. Bd6 must give Black the chance of a Kling-Horwitz (K&H) position, for example:

72. [Bd6] Nh4 73. Bc5+ Kg3 74. Kd3 Nf5 75. Bb6 Nh4 76. Bd5 Ng2 [K&H] 77. Bc7+ Kf2 78. Kd2