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## EDITORIAL

"The chess study is close to the chess game because both study and game obey the same rules." This has long been an argument used to persuade players to look at studies. Most players prefer studies to problems anyway, and readily give the affinity with the game as the reason for their preference. Your editor has fought a long battle to maintain the literal truth of that argument. It was one of several motivations in writing the final chapter of Test Tube Chess (1972), in which the Laws are separated into $B M R$ (Board+Men+Rules) elements, and $G$ (Game) elements, with studies firmly identified with the $B M R$ realm and not in the $G$ realm. The only significant fly in the ointment has been the 50 -move rule - in our view a $G$-element but often subsumed by composers and others into the $B M R$ realm. (The three-fold repetition draw rule is another anomaly, but more controversial, and a minor one in comparison.)
As a result of the FIDE Rules Committee's revision of the Laws at Erevan in 1996 we have come to the end of that particular road. Looking back we can see that the computer was responsible. It was the computer that inched its way onto the scene by conclusively demonstrating that there are endings that may require over 50 moves to win - without captures or pawn moves. True, one can point back to pre-computer days, to 19th century Crosskill with his meticulous rook and bishop against rook endgame analyses, and then to Troitzky, with some instances in the two knights against pawn endgame. The FIDE Laws did not acknowledge either of these (as exceptions to the ancient ' 50 -move rule') until the mid 1980's. By then the computer had really got busy. In 1974 the Russians published a long com-puter-generated line in queen and $g 7$ pawn against queen. But they did not follow this up, and their
achievement, recorded only in a scientific journal, was not widely noticed. It was left to the discoveries by Ken Thompson of Bell Laboratories in New Jersey, beginning in 1983, to put the boot in.
Aside from a few upsets to endgame theory, the set of 'total information' 5 -man endgame databases that Thompson generated over the next decade demonstrated that several other endings might require well over 50 moves to win. These discoveries arrived on the scene too fast for FIDE to cope with by listing exceptions - which was the first expedient. Then in 1991 Lewis Stiller and Noam Elkies using a Connection Machine produced a 223 -move maximum length win in a 6 -man pawnless endgame; and another 6 -man pawnless endgame (Stiller again) requires 243 moves. FIDE woke up to the need to take drastic action - but what action?! These thrilling discoveries may have elated the élite, but have left players either bemused or indifferent, with FIDE floundering in their wake.
So, given that the studies fraternity (which is not really an elite) received and still receives all such new proven discoveries with generally open arms, while players in general, and FIDE in particular, do not, your editor decided to take the initiative. He devised a modus vivendi, aimed at maintaining the classic solid link between the game and the study: a draft addendum to the relevant FIDE article in the Laws. The main article wording could make any provision whatsoever, and could be modified in the future without restriction, but the addendum would simply exclude studies from its application.
This proposal, unanimously endorsed by the Studies Subcommittee during the FIDE PCCC session at Turku in 1995, was considered by the FIDE Rules Committee at Erevan in the autumn of 1996 - and rejected. No representative of the
studies community was either present or invited: the case for the addendum was put by Stewart Reuben, Britain's delegate and now Chairman of the British Chess Federation. The reason given for rejection was that the drastically revised Laws will explicitly state in their new preamble, that "FIDE Laws of Chess cover over-the-board play". This, at long last, is FIDE's 'drastic action'. Given the clear preamble, the above proposed addendum to the ' 50 -move rule' becomes logically redumdant.
From Ivii1997 the situation is therefore this: the rules governing studies are no longer the same as the rules governing over-the-board play. While this is sad from the standpoints of 'gens una sumus' and the proselytising of players, it is a welcome acknowledgement of a com-puter-established fact, and on balance is a constructive clarification. Moreover, the studies fraternity can now consider itself collectively as defenders of the true faith, since they and they alone uphold endgame theory (i.e. the primacy of the true powers of the chessmen) in its entirety, which the over-the-board game accepts only. selectively. Let us hope that claims that the game of chess is a science will now be fewer.
Since studies are, by their definition, distinct from over-the-board chess (because studies are not contests between living protagonists), the study is not necessarily affected by any article that the 'big' FIDE approves. (In fact FIDE has wisely decided to return to the oldest and simplest version of the 50 -move rule, with the record of moves, the score, of a game, determining the game's outcome - see the wordings given below.) So 'we' must devise 'our' own rules. Work on this, even if concentrating on chess problems rather than on studies, has in fact been in progress through the intermittent meetings of the Codex Subcommittee of the FIDE PCCC ever since the historic meeting in Piran (Yugoslavia) in 1958, which was provided with drafts based on spadework by Ing. Nenad Petrovic. That part of the Codex adopted in Rotterdam in 1991 includes the statement that the '50-move rule' does not apply to chess composition unless the stipulation states otherwise. We, or the vast majority of 'us', are content with this.
So, the computer has driven a wedge between the game and the study, and now is the moment to acknowledge the fact. If we find ourselves with one fewer argument to use to attract players towards studies, we shall have to look elsewhere for other arguments. The one obviously to hand is the beauty that lies in all the best studies. There is nothing to cry about. We can now free to
celebrate the new possibilities that the once static, but now newly burgeoning, field of endgame theory offers, and on which the game, for its own perfectly understandable reasons, has turned its back.

John Roycroft 16xi96

Relevant new FIDE Laws wordings, in effect from 1vii1997, read:
5.5 (in the section devoted to Rules of Play)

The game may be drawn if the last 50 moves have been made by each player without the movement of any pawn and without the capture of any piece. (See Article 9.3.)
9.3 (in the section devoted to Tournament Rules) The game is drawn, upon a claim by the player having the move, if
(a) the last 50 consecutive moves have been made by each player without the movement of any pawn and without the capture of any piece, or
(b) he writes on his scoresheet, and declares his intention to play, a move which shall result in the last 50 moves having been made by each player without the movement of any pawn and without the capture of any piece.
9.4 If the player makes a move without having claimed the draw he loses the right to claim, as in Article 9.2 or 9.3 , on that move.
FIDE has also adopted the following:
1.3 If the position is such that neither player can possibly checkmate, the game is drawn.
6.9 ...if a player does not complete the prescribed number of moves in the allotted time, the game is lost by the player. However, the game is drawn if the position is such that the opponent cannot checkmate the player by any possible series of legal moves (i.e. by the most unskilled counterplay).
9.6 The game is drawn when a position is reached from which a checkmate cannot occur by any possible series of legal moves, even with the most unskilled play. This immediately ends the game. No doubt EG readers, especially those who are fans of Amatzia Avni's Creative Chess will repond to the implicit challenge by striving to concoct positions where it is difficult ' $i$ mmediately' to apply 9.6 above!

EG is most grateful to Stewart Reuben for his cooperation in establishing the facts and in reporting them so fully and faithfully to us.

39th FIDE PCCC MEETING, Tel-Aviv 12-19x96
We thank the British Delegate, John Rice, from whose report we glean the following details.
Only Bulgaria, Estonia, Latvia, Mongolia, Poland and Spain were unrepresented among the 27 member countries. Japan's delegate: Tadashi Wakashima.
The Czech Republic hopes to publish the results of the 5th WCCT in iv97. The themes for the 6th WCCT, to be organised by Germany, have already been chosen - but not, of course, yet made public - leaving the judges still to be selected.
The 1986-88 FIDE Album is being reprinted with English indexes. For the 1989-91 Album only the two-move section judging is incomplete.
The suggestion that there should be a 'World Champion' (or 'World Champions') for composition based on Album selections was discussed - and eventually outvoted. An all-time list of Album points will accompany the next Album to be published.
Judges' titles and titles for composing were awarded, but none of relevance to the study genre. The International Solving Master title was awarded to Noam Elkies (USA and Israel) for a brilliant first appearance performance in which he pipped two others (on time) for first individual place in the WCSC, in which the team title went to Israel - performing without Noam! Noam also qualified for a grandmaster solving norm, along with Jonathan Mestel (GB), Ram Soffer (IL), Boris Tummes (D), Mark Erenburg (IL), Eddy van Beers (B) and Jacques Rotenberg (F).
A new title, that of FIDE Solving Master, was approved: to gain the title, a solver needs two norms achieved in a WCSC or PCCC approved national competition. Norms will be granted to solvers gaining at least $75 \%$ of the winner's score and coming within the top $40 \%$ of participants. To qualify for PCCC approval, a national competition must have both international participation and a qualified International Solving Judge as director or observer. "There will be further discussion at next year's meeting regarding the appointment and role of such jurges, but the idea was approved in principle, tr ugh not without some concem being expressed.'
Honorary membership of the P.CC was accorded to Aleksandr Kazantsev (RUS), now aged 90, outstanding study composer, science fiction author, and an active force in the early days of the PCCC, for instance at Piran in 1958.
Sub-committees: the Terminology sub-committee held its first meeting and immediately found that differing interpretations of the same terms in
different countries would make the task of compiling a list of agreed definitions of fre-quently-used terms almost impossible. The Codex sub-committee's work nears completion. WCSC: Brian Stephenson, the Director at Tel-Aviv, has undertaken to direct again in 1997.
The sub-committee for studies consisted (at Tel-Aviv) of David Gurgenidze (GEO), Valery Gorbunov (UKR), Virgil Nestorescu (ROM), and Yochanan Afek (ISR). The results of its deliberations: the idea of a separate solving tourney for studies, divorced from the WCSC, was discussed at length but eventually rejected; the (external) suggestion that the "Kasparyan Memorial Tourney" [the Armenian one, or the Dutch one?] should be regarded as a World Championship 'did not meet with approval'; consideration having been given to the passage of time, studies placed in the "USSR vs. Rest-of-the-World" match may, as an exception to the normal rule, be regarded as published 'even if no diagram appeared'; at the request of the WCCT sub-committee, the study theme for the 6th WCCT was selected and a judge appointed. (Cross-referral among the various PCCC sub-committees seems, at long last, to be working!)
We understand that Bedrich Formanek, the PCCC President, is in favour of a high degree of autonomy of the various sub-committees, expecting important matters to be referred back to, and decided by, by the full Commission only if the sub-committee itself feels that the discussion exceeds its remit. So, 'federalism', not 'centralism', is the 'in' policy!
Studies mini-lectures were given by Gurgenidze and Elkies.
Pula (Croatia) narrowly won the vote over St Petersburg for the 1997 venue. The dates: 6-13ix97, at the Hotel Histria. St Petersburg remains the favourite for 1998
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FIDE ALBUM 1992-94 - first report
The closing date for entries for the 1992-94 FIDE Album selection tourney (a triennial circus for published compositions) was lix96. In the past AJR has been, and now is again, the section director for studies. The work of section directors and judges is, of course, unpaid.
At the final count 531 entries were received nearly all of them obeying the rules! 'Rules?!' OK, since you ask: some entries omitted the composer's address, some were on non-A5 size sheets, some were written on both sides of the paper, some continuation sheets were not logically linked to the diagram sheet, many had inadequately
defined sources, and a few were not in the required quantity ( 5 copies).... [see also below, for a disturbing tendency] but none has been rejected, even those that arrived up to $3 \times 96$, on which date a surface mail item posted in Caucasian Georgia in late viii96 was delivered in North London. A subsequently received Belorus entry was, though, reluctantly returned to the submitting composer. The total is significantly smaller than in previous three-year periods, reflecting, we think, the reduction in composer and tourney activity in the countries of the former Soviet Union.
SD heaved a sigh of relief when he had recorded, sorted, eliminated duplicates, manually numbered, and finally dealt out three sets of the polyglot and mostly hand-produced sheets, one for each judge: Yo.Afek (lsrael), D.Gurgenidze (Georgia) and N.Kralin (Russia). The batches were delivered by hand through the great kindness of Gady Costeff who happened to be passing through London from California on his way to Tel-Aviv for the FIDE Meeting in Israel from 12-19x96.
The judging process of allocation points from 0 (minimum) in half-point steps up to 4 (maximum) will obviously take several months. Are there any observations that can be made at this early stage? Yes, a few. With 143 composers the average number of studies submitted might seem to be 3.7 per composer. But this 'statistic' is misleading, because of the rather large number of joint compositions - more, probably, than in other genres. To get a better feel for what was submitted we can point to the following figures (in which joint compositions have not been excluded): D.Gurgenidze - 51; O.Pervakov - 30; V.Prigunov - 23; Em.Dobrescu - 20; A.Selivanov - 19; $\dagger$ L.Mitrofanov - 18; I.Bondar - 15; L.Topko - 15; V.Nestorescu - 13; V.Razumenko - 12; P.Arestov -9. What is remakable here is that all of Leopold Mitrofanov's entries were joint compositions submitted by the co-composer, because the great Leopold died in the autum of 1992 . We should also like to draw attention to the tendency of some titled composers not to exercise sufficient discrimination in selecting their work. In contrast one untitled composer from western Europe submitted just one study, but we can state with some confidence that it will be rated maximum (or near-maximym) points, namely 4 by each judge for a magnificent and rare total of 12.
An unexpected opportunity (for the section director and judges, anyway) provided by this tourney is the chance to form an opinion concerning the access to current computer technology of today's study composers around the globe. Only a very few entries were prepared using desk-top
publishing equipment (generally with figurines), and not many more even used computers (those that did mostly had dot-matrix printers), though typewriter usage was even rarer. The most common diagram was the stamped variety, with hand-scrawled pieces individually designed by, and peculiar to, the submitting composer being the noram. Manuscript solutions (in any of half-a-dozen languages) remain the most common variety. Very suprising is the apparent scarcity of photocopiers (spirit-copiers did seem to be available in some out-of-the-way spots) in study-land, but this may be partially accounted for by the intractability of the problem of distinguishing black and white pieces when poorly reproduced. There were examples of extraordinary ingenuity in the use of diagrams from the printed page, some thick-and-thin (ie paper) submissions being, if not exactly works of art, at least contributions to the scissors and paste technique known as collage.
One disturbing tendency manifested itself several times. This is to submit an unpublished version of a study, prima facie an attempt to evade the rules, which state that all entries must have been previously published. This tendency is the more deplorable when the 'source' given is an EG numbered diagram (rarely an original, of course) where that diagram does not correspond in all respects with the position submitted by the composer. Does any composer wish to defend this practice?

Interview with G.Slepyan of Belorussia
Q: First of all, Grigory Yakovlevich, tell us something about yourself.
A: Well, I was born in Minsk in 1952. After finishing school in the maths and physics speciality 1 entered the Minsk Institute of Radio Technology. In my second year there I began work in Professor A.A.Kuraev's laboratory researching high-energy electronics. I learned a great deal from Professor Kuraev, and not just science he, as it were, took me under his wing. Five of my scientific papers appeared in All-Union journals before I left the institute. After that I worked for 15 years in industrial radio technology. I defended theses at candidate and doctoral level on the diffusion of radio waves. In 1994 I became an 'active member' of the New York Academy of Sciences. My current work is in the field of theoretical nuclear physics in the Scientific Research Institute of the Belorussian State University. Over 100 of my scientific papers have
been published. In 1993 the Peter Peregrinus publishing house produced a book, of which I was joint author, with the title Propagation, scattering and dissipation of electromagnetic waves.
Q: Let us turn to chess. How did it come into your life?
A: I began to play while at school. My first study appeared in Shakhmaty $\vee S S S R$ when I was 15. Early on I abandoned practical play because it was incompatible with scientific work. Chess composing, on the other hand, offers greater possibilities because it can be fitted into one's spare time. 39 of my studies have been published in soviet and other chess magazines.
Q: Did you have a model to look up to?
A: Yes 1 did. The Armenian Genrikh Kasparyan was my remote mentor. I pored over his books and hope to have inherited some of his experience and adopted his principles.
Q: How do you get your chess ideas?
A: In different ways. Sometimes there is a snag, a hiccup, in something that I come across in print, and that starts the ball rolling. Sometimes it is pure imagination. It has happened that an original solution has come to me in my sleep. My favourite study, which shows a pair of echoed stalemates in the "Troitzky" endgame [EG117.9951], was born after prolonged birth-pangs.
Q: What does chess composition mean to you? Is it relaxation, or is it intensive mental labour?
A: I see in chess composition a melding of art, science and sport. As regards art, chess compositions reflect the life of the chess pieces in artistic form. The link with science arises from the canons or laws that govern the game, and also from the balance of knowledge and experience that are required. The sporting component is in the element of competition in which the strongest (or what is called the strongest) take the honours. But in spite of all this, for me the creation of compositions remains a hobby.
Q: What do you consider your main competitive achievements?
A: My best was third place in the 'Match of the Century' (Theme 'A') between the Rest of the World and the USSR. [The full results await publication - perhaps even in EG! AJR] Q: Is there a Belorussian school of chess? A: No, nor has there ever been. The strongest Belorussian representative in practical play was, or is, Boris Gelfand, who has now emigrated westward. As far as composition is concerned the composers in my country are simply individuals. The magazine Chess and Draughts in BSSR, the publishing vehicle of the chessi and draughts or-
ganisation, has not survived into our times due to lack of resources.
Q: Besides chess, what do you do in your spare time?
A: For 20 years I practised karate. And I love painting. I have produced about 100 drawings and oil paintings. I wanted to get the hang of impressionism and pointillism. My favourite painters are van Gogh, Rerikh, and Claude Monet. For reading I am fond of serious poetry. Now and again I put together literary parodies in verse.
Q: Finally, Grigory Yakovlevich, what human quality do you value most?
A: The great thing is if a person can never be brought to his knees by anybody.
The above interview was conducted on EG's behalf in viii 1996 at the composer's home in Minsk by Natalia Savenok-Becker.
No 10468 G.Slepyan
prize, Zvyazda, 1994

h6g8 $3144.317 / 5$
No 10468 G.Slepyan 1.Sf6+ Kf7 $2 . d 8 S+$ Kxf6 3.Rdl+ d4 4.Rfl+ (Rxgl? Sg8 mate) Sf5+ 5.Rxf5+ Bxf5 6.Bxd4+ Qxd4 7.e5+ Qxe5 (Kxe5;Sc6+) 8.g8S mate.
Judge of this tourney was V.Sichev.
No 10469 G.Slepyan
1st HM, Szachista, 1993

e8f6 $0045.125 / 5$
Draw

No 10469 G.Slepyan 1.h7 Kg7 2.h8Q + Kxh8 3.Sxg2 Bb5+4.Kf8 flQ+5.Sf7+Kh7 6.Sf4/i Sh6 (Qxf4;Bf5+) 7.Bf5+ ${ }^{-}$Sxf5 8.Sg5+ Kh6 9.Sf7+ Kh7 $10 . \mathrm{Sg} 5+$, drawn by perpetual check. i) 6.Se3? Se7 7.Bf5+ Qxf5 8.Sxf5 Sg6 mate.
........................
No 10470 G.Slepyan
Szachista, 1994

e8g7 $1042.023 / 6$
Draw No 10470 G.Slepyan 1.Bh6+ Kh7 2.Qh3 alQ/i 3.Bg5+ Kg8 (Kg7;Qxd7+) 4.Qb3+ d5 5.Qxd5+ Kh8 (Kh7;Qd7+) 6.Qc6/ii Sc7+ 7.Kf7 Qfl+ 8.Qf6+/iii Bxf6 9.Bxf6+ Kh7 stalemate.
i) "Sc7+ 3.Kf7 Sh8+ 4.Ke7 Sd5+ (alQ;Bf8+) 5.Kxd7 alQ 6.Bd2+ K-7.Qg2+." But continue: 7...Sg6 8.Qxd5 Qa7+, and Black wins.
ii) 6.Qd3? Qa4+ 7.Kf7 Qa7+ 8.Kxg6 Qh7+. Or 6.Qe4? Kg7 7.Qb7+ Sc7+.
iii) 8.Kxg6? Qd3+ 9.Kh5 Qh3+ 10.Bh4 Qf5+ 11.Bg5 Se6 12.Qa8+ Kh7 13.Qa7+ Sg7+ 14.Kh4 Qf3 wins.

## JURI RANDVIIR

This tribute to the late Juri Randviir of Tallinn, Estonia, is based partly on extracts from the obituary by Alexander Hildebrand in Tidskrift för Schack 7/96 and partly on personal communications.

Hildebrand was six years older than Juri Randviir and takes pride and some responsebility for introducing Juri to chess. They knew each other in Tallinn 55 years ago. Randviir developed fast as a chessplayer. Then came the war. Independent Estonia was first a victim of the 1939 HitlerStalin pact when the USSR snatched it, then a victim of German occupation, then of Soviet reconquest. There were many tragedies. Hildebrand, whose brother was shot for having collaborated with the Soviet occupation, was himself imprisoned. He was released by a fluke - the orders of a chess acquintance who happened to
inspect the prison wearing German army officer uniform - while a number of the other inmates were shot. Perhaps the worst was the exodus of a quarter of the population over a 10 -year period. deported to Siberia, or fleeing to Sweden and Germany - the number deported to Siberia in 1949 is estimated to be over 50,000 , while the number fleeing to Germany was around 100,000 . By then the chess columnist Hildebrand had quit Estonia for Sweden on impulse. This was in 1944, in between the Germans leaving and the Soviet troops arriving. With father and stepfather of different nationalities Hildebrand grew up speaking Estonian, French, Russian and German, mastering Swedish subsequently. It was 46 years before the two men met once more, by which time Randviir had become the second player (to Paul Keres!) in Estonia, a position he held from 1946 to 1962. In any event he won the Estonian championship four times, won a tournament in Baku in 1948, and came second to Keres at Pamu in 1955 ahead of Liliental, Mikenas, Ragozin, Suetin, Tolush and others. [In 1955 Randviir told AJR how he was put under pressure from the organisers to cede his hard-earned prize money out of compassion for the soviet players 'who had travlled so far expecting to win'!!] As commentator and resident expert Randviir broadcast frequently on chess. He still had entrée to the radio broadcasting station where he showed AJR around and regaled him with anecdotes. He was constantly active as trainer and coach.
As regards studies Radnviir was a late starter. He showed interest only in 1988 (no doubt influenced by his renewed contact with Hildebrand) and in the years up to his death composed no fewer than 100. With his lack of background and influence (apart from Hildebrand's! AJR) his work suffered now and then, as one might expect, from anticipation, but benefited by its freshness and genuine originality. Study composing developed into a passon. The contrast with Keres is intriguing: K res produced around 200 problems and 25 studit, while Randviir composed about 25 problems as vell as his century of studies, many of the latter prizewinners. Randviir's composing style unites the combinatorial and the strategic by which we mean that his technique was well able to handle the most complex of hand-to-hand combat intricacies, while a complete Randviir study is often understood only in terms of a longrange and original, hence unexpected, 'target' aim, based on his almost instinctive strong-player familiarity with one or other sub-domain of endgame theory. Almost his last contribution to the study world must have been to enter five of
his studies for the current FIDE Atpum (1992-94) selection tourney.

John Roycroft, 27xi96
$\dagger$ MARIO TAMBURINI
1vi33-27vii96
The sad news of the death of the Italian composer is reported in L'Italia Scacchistica (11/96). Tamburini scored successes in the 1960s in the magazine's informal tourneys.


## EG 120

No. 10186, L.Mitrofanov. According to Albert van Tets (Republic of South Africia) the study can be corrected by moving the bPb4 to $\mathrm{d4}$. The intended solution remains unchanged.
No. 10200, S.Osintsev. The flaw mentioned in the definitive award is $1 \ldots . \mathrm{Kg} 5$ 2.Rd4 $\mathrm{Sg} 6+$ $3 . \mathrm{Kg} 7 \mathrm{Bb} 3$ and White cannot win, according to Alberto Foguelman (Argentina). Sergey Osintsev gives $2 . \operatorname{Re} 4$ as a possible improvement and adds "A correction is to start the solution with 1.Kf7. Alas, in eliminating the clumsy first move capture 1.Rxf4, the solution loses the beautiful and subtle 1... Kh5. One always has to sacrifice something!".
No. 10262, M.Gogberashvili/V.Neidze. Vazha Neidze kindly informs us, that he was the coauthor of this joint composition.

## EG 122

No. 10383, V.Vlasenko. It is a pity that the award failed to give notes to this study, as it is completely incomprehensible without supporting lines. Here is a full solution:
1.e7/i f2 2.Sf5+ Kf6 3.e8S+ Ke6 4.Seg7+/ii Kd5/iii 5.Se3+/iv Kc6/v 6.Kxg3 f5 7.Kf4/vi Kc5 8.Se6+ Kb4 9.Sg5 Kc3 10.Sh3 Kd2 11.Sxf2 Ke2 12.Sh3/vii Ke1 13.Sg1 Kf2 14.Sf3z Ke2 15.Sg2 $\mathrm{Kfl} /$ viii $16 . \mathrm{Kg} 3 \mathrm{f} 4+17 . \mathrm{Kh} 3 / \mathrm{ix}$ wins.
i) $\quad 1 . \mathrm{Sff}+\mathrm{Kh} 72 . \mathrm{exf} 7 \mathrm{~g} 23 . \mathrm{f8Q} \mathrm{glQ}$ draw.
ii) What is it all about? The position will eventually reduce to 2 knights vs. fpawn. Stopping the pawn with a knight on $\mathrm{f4}$ or f 5 would win easily, but as it is this is impossible. White must capture the annoying bPf2 first and thus he can only reach a blockade with a knight on f 3 . In a situation like this Black draws if his king reaches $g 2$ or if he finds a
positional draw with his king nearby, e.g. 4.Sxg3 f5 5.Sc7+ Kd6 6.Sb5 + Kc5 7.Sc3 Kd4 8.Sd1 Kd3 9.Sxf2+Kd2z 10.Sh3 Kelz draw, as the king reaches $g 2$.
iii) The composer's main line $4 \ldots . . \mathrm{Kd7}$ 5.Sxg3 f5 6.Sfl (please note the try 6.S7h5 Kd6 7.Sf1 Kd5 8.Shg3 Kd4 9.Sh1 Kd3 10.Sfg3 with its clever refutation 10.... Kc2 11.Sxf2 Kd2z draw) Kd6 7.Se3 Kc5 transposes to our solution, but retreating the king voluntarily looks illogical.
iv) $\quad 5 . \mathrm{Kxg} 3 \mathrm{flS}+$ draw; $5 . \mathrm{Sxg} 3$ f5 $6 . \mathrm{Sff} \mathrm{Kd4}$ 7.Sh5 Kc3 8.Shg3 Kd3 and White cannot make progress.
v) Black finds no convenient square for his king and must retreat after all. 5.... Kc5 6.Kxg3 f5 7.Se6+ and 8.Sf4, or 5.... Kd4 6.Sgf5 $+\mathrm{Kd3} 7 . \mathrm{Kxg} 3$ both win for White.
vi) Of course the pawn mustn't advance any further.
vii) The only move! 12.Shl Kel draw; 12.Sfdl Kel draw.
viii) Black sidesteps the reciprocal zugzwang 15.... Kf2 16.Sgh4z, but so does White!
ix) Finally the black king is driven back: 17.... Ke2 18.Sgh4 Kf2 19.Kh2 Kf1 20.Sg6 Kf2 21.Sges Kfl 22.Sg4 and mate in 56 moves.
No. 10384, V.Kondratev/Y.Solovyov. A dual: 3.Kg2 hxg1Q+4.Kxgl exd3 $5 . \mathrm{Kf} 2 \mathrm{Kg} 5$, and now many roads lead to Rome: $6 . \mathrm{Se} 8 \mathrm{c} 67 . \mathrm{Ke} 3$, suggested by Marco Campioli (Italy), or 6.SdS d2 7.Ke2 (but not 7.Sc3 Kf4 8.Ke2 dlQ+ 9.Kxdl Ke 3 10.Se2 Kd3 draw) Kf5 8.Sc3, with an easy win in both lines.
No. 10385, L.Topko. There are many duals. 2. Kf 3 Rxc 2 (2... alQ 3.Rh8+ Kg 1 4. $\mathrm{Se} 2+$ and mate) 3.Rh8+Kg1 4.Sxa2 (Marco Campioli), but also 3.Kf3 Rxg2 4.Sg6 Rxa2 5.Sf4 or 4.Sg6 Rxa2 5.Rh8+ Rh2 6.Sh4 (Rh3 7.Kf2 Rh2+8.Kg3). The latter line was the finish of the game G.KasparovJ.Polgar, Dos Hermanas 1996.

No. 10390, Y.Kuruoglu. No solution, Black can easily reach a won ending rook vs knight. A simple line is $4 . . . \mathrm{Kf4} 5 . \mathrm{Sxf} 3, \mathrm{Kg} 3$ 6.Sd4 Kf2 wins.
No. 10392, Y.Kuruoglu. No solution: according to Marco Campioli 5.... Sd4 6.Ke3 Se6 7.Kf2 Sg5 wins for Black (8.Ke3 Kf6 9.Kg4 Sf7 10.Kg3 Se5 11.Kf4 h6).

No. 10393, Y.Kuruoglu. There is some evidence that the GBR-class 0441 with opposite coloured bishops should be considered as won (cf. EG 81.5741, 86.6205, 113.9556). Thus 1.BdS + Kc3 2.Sxb2 Rxg3 3.Sa4+ wins for White.

No. 10397, B.Gusev. A very beautiful reciprocal zugzwang, but unfortunately the author got the introductory play wrong. $3 . \mathrm{Se5}$ (for Bc6 and Sd7) Kf4 4.Bd5 is a simple dual (Marco Campioli).
There is another win for White, which is more complicated but very beautiful: $1 . \mathrm{Sg} 4+\mathrm{Kf} 4$ (1... Kxf3 2.Se5+; 1.... Kd4 2.b7 Rd8 3.Sf6 and 4.Sd7) 2.Bc6 with 4 lines:
i) $\quad 2 \ldots$ Rf7, preventing both 67 and Sf6, is not the most critical move, but this line shows the basic winning plan for White: 3.Sf2 Ke5 4.Se4 (threatening to bring the king to a7) Ke6 5.b7 Rf8 $6 . \mathrm{Kb} 2 \mathrm{Ke} 7$ 7.Kc3 Rb8 8.Bd5 (for Se4-c5-a6; 8.Kc4 Kd8 only draws) Rh8 9.Sc5 Kd6 10.Kc4 wins.
ii) $\quad$ 2.... Rd 8 3.b7 Kxg 4 4.Bd7+ Kg 5 5.Bc8 Rd5 6.Bd7 wins.
iii) $\quad 2 \ldots \mathrm{Rdl}+$ (or $2 \ldots . \mathrm{Rd} 3$ ) $3 . \mathrm{Kb} 2$ (3.Kc2? Rd6) Rd2+ 4.Kb3 (4.Ka3 Rd3+ 5.Ka4? Kxg4 6.b7 Rd8 7.Bd7+ Kg5 8.Bc8 Rdl draw) Rdl 5.Sf6 (White mustn't get carried away: 5.Be4 Kxe4 6.Sf2+ Kd5 7.Sxd1 Kc6) Ke5 6.Kc2 Rd6 (6.... Rd4 7.Sd5; 6.... Rd8 7.Se4) 7.Sd7+ Kf5 8.b7 Rxc6+ 9.Kd3 Rd6+ 10.Kc4 Rc6+ 11.Kd5 wins.
iv) $\quad$ 2... Rd4 3.Sf6 Rb4+ (3.... Ke5 4.Sd5) 4.Kc2 Rc4+ (4.... Ke5 5.Sd5 Rh4 6.b7 Rh8 7.Sb4 Kd6 8.Bf3) 5.Kd3 Rxc6 6.Sd5+ Ke5 7.67 wins.

No. 10399, V.Lovtsov. This was already shown to be unsound in Spotlight EG 119 (notes to 118.10070). In the line 2.... Bb6 Black wins by 9.... Rb4.

No. 10402, S.Radchenko. A second solution: 1.Rb4 b2 2.Bg5 stops the pawns and wins easily (Marco Campioli).
No. 10420, M.Garcia. No solution. In the pawn ending arising after 3.... Bf3 Black wins by the capture-avoidance 22.... Kdl 23.Kxd4 Kc2 followed by taking the a-pawn. Thanks to this little finesse the white king cannot reach c 2 in time.
No. 10423, G.Nekhaev. A nice little supporting line, that enhances this exquisite domination study, is missing: 5.... Bc6 6.Kc7 Sg6 7.Rf5+ Ka6, and now not 8.Kxc6 Se7+ 9.Kc7 Sd5+ 10.Rxd5 stalemate, but 8.Rf6, winning.

No. 10424, B.Lurye/L.Mitrofanov. 1.Sc4 Qf5+ 2.Kc3 Qbl 3.Qxg4 should win for White, although the position is very tricky. Here is is a sample line: 3.... c5 4.Se3 (4.Sd2 c4) Qb2+ (4.... Qc1+ 5.Sc2+ Kbl 6.Qa4 Qb2+ 7.Kd3 Qf6 8.Qb3 $+\mathrm{Kcl} 9 . \mathrm{Qf} 7$ ) $5 . \mathrm{Kd} 3 \mathrm{Qbl}+6 . \mathrm{Kd} 2 \mathrm{~Kb} 2$ 7.Qc4 alS (both 7.... alQ 8.Qb5+ and 7.... Qxg6 8.Qc3+ lead to rapid mate) $8 . \mathrm{g} 7 \mathrm{Sb} 3+9 . \mathrm{Qxb} 3+$

Kxb3 10.g8Q+ Kb2 11.Sc4+ Kal 12.Qg7+ Ka2 13.Qa7+ Kb3 14.Qb6+ Ka4 15.Qa5+ (not 15.Qxb1 stalemate) Kb3 16.Qb5+ Ka2 17.Qa4 mate.
No. 10426, L.Katsnelson/V.Kovalenko. No solution: 4... Qe6 5.h8Q Kxc5, and neither 6.Qxh4 Qxe nor 6.c3 h3 7.d4+ Kc6 promist much (Marco Campioli).
No. 10430, G.Slepyan. The calm 1.... Rd3 seems to turn the tables in Black's favour: 2.d8Q f1Q 3.Rb2 Bc3 4.Qa7 Bxb2+5.Kb4+ Kb1, or 2.Qe5+ b2+ 3.Ka4 Bdl+ 4.Kb5 Bc3 (Marco Campioli). Well spotted!
No. 10433, A.Kotov. A second solution: $1 . \mathrm{Sb} 5$ Rgl+ 2.Kh4 Rh1+ 3.Kg5 Rh5+ 4.Kxh5 Rhl+ 5.Kg5 alQ 6.cSd6, when Black cannot cope with the various mating threats (a7, b7, d8) and loses after 6.... Rh5 + 7.Kxh5 Qhl $+8 . \mathrm{Kg} 6$ Qh6+ 9.Kf7 Qh7+ $10 . \mathrm{Kf8}$.
No. 10438, E.Fomichov. A simple dual: 2.Bd2+ Kc4 3.Sd6+ Kd5 $4.5 f 5$ wins, too (Marco Campioli).
No. 10443, D.Ioffe. A dual: 4.Rg8 hlQ 5.Rg6+ Qc6 6.Bd7 Qxg6 7.Bb5 mate (M.Campioli). My personal preference is $6 . \mathrm{Kel}$ (for Bfl mate).
No. 10444, V.Prigunov. Unsound. White also wins by 3.5 . (threatening g7 and g8S mate) e1Q 4.Sxel Bd4 5.g7 (but not 5.Bxd4 alQ 6.Bxal b2 7.g7 bxalQ 8.g8Q Qg7+ draw). Better is $1 . .$. b3, retaining the option of promoting the e-pawn with check, which transposes to the intended solution after $2 . \mathrm{Sel} \mathrm{Bf} 2+3 . \mathrm{Kg} 4$, but here Marco Campioli gives 3.... b2 4.Bxb2 Bxel 5.g7 (5.Sf8 Bc3) Kh7 $6 . \mathrm{Sg} 5+\mathrm{Kg} 87 . \mathrm{Sf} 3 \mathrm{Bd} 2$ draw.
No. 10452, L.Topko. There is the ugly dual 3.Rxf4 (M.Campioli), therefore Black should take the rook at move 2.
p.917, J.Kling. Contrary to what was said on p. 917 I.b8Q is not given as a dual in Harold van der Heijden's work. There are some minor duals in the course of the solution.

DIAGRAMS AND SOLUTIONS
editor: John Roycroft
17 New Way Road NW9 6PL London

Intellektualnye Igry, 1993 'Kopnin MT'
This informal tourney was judged by Michal Hlinka (Slovakia)
We received the provisional award in holograph form, with warning from that money for publication in "II"-14 was so short that it may not appear, or not as planned!

No 10471 Viktor Kondratev (Chelyabinsk)
1st prize Kopnin MT


No 10471 Viktor Kondratev 1.Ke6, with:
elQ+ 2.Be5+ Kg8 3.Rg7+ Kf8 4.Rb7! Kg8 5.Rb8+ Kh7 6.Kf5/i, or
f2 2.Be5+ Kg8 3.Rg7+ Kh8 4.Rf7+ Kg8 5.Rxf2 elQ 6.Rh2 and wins.
i) Because the 'defence' Qbl; is ruled out by precise choice of square on White's move 4.
A remarkable development of the famous correction by Rinck of a Réti classic.

No 10472 Aleksandr Golubiev (Yaroslav region)
2nd prize Kopnin MT


Draw
No 10472 Aleksandr Golubiev 1.Kb7/i Qb4+/ii 2.Rxb4 cxb4 3.Bf3 e2 4.Bxe2 a3 5.c3 b3/iii 6.axb3 a2 7.b4+ Ka4 8.Bdl+ Kb5 9.b3 alQ 10. Be 2 mate.
i) 1.Kc7? Qh2+. Or 1.Ka7? Qb4 2.Rxb4 cxb4 3.Bf3 e2 4.Bxe2 a3 5.bxa3/iv b3, and stalemate ensues.
ii) Qxc2 2.b4+ cxb4 3.Rg5+ and mate.
iii) axb2 6.cxb4+ Kxb4 7.Bd3 wins.
iv) $5 . \mathrm{c} 3$ ? b3 6.axb3 a2 7.b4+ Ka4 8.Bd1+ Kb5 $9 . \mathrm{b} 3 \mathrm{alQ}+$ wins.
This is a successful elaboration of a study by V.Pudovkin (Schach, 1983). The attribution 'after Pudovkin' is required.

No 10473 Igor Zamotaev (Vladivostok) and Vitaly Kovalenko (Bolshoi Kamen)
3rd prize Kopnin MT

glh3 3072.01 4/5
Draw
No 10473 Igor Zamotaev and Vitaly Kovalenko 1.Bd7+ Bg4 2.Sxf4+ Kg3 3.Se2+ Kxf3 4.Bc6+ Qxc6 5.Sd4+ Kg3 6.Se2+/i Kh3 7.Sf4+ Kg3 8.Se2+Kf3 9.Sd4+ Kf4 10.Sxc6 Kg3 11.Sd4 h3 12.Kh1 h2 13. $\mathrm{Se} 2+/ \mathrm{ii}$ Bxe2 stalemate.
i) 6. Sxc6? h3, and $7 . \mathrm{Sd} 4 \mathrm{~h} 2+8 . \mathrm{Kh} 1 \mathrm{Kh} 3$ wins, or
7.Se5 h2+ 8.Khl Be2 wins.
ii) 13.Sf5+? Kh3 14.Sh4 Bdl 15.Sg2 Kg3 16.Sh4

Be 2 , and 17.Sf5+ Kh3 18.Sh4 Bf1, or 17.Sg2
Bd3 18.S- Be4+ 19.Sg2 Bxg2 mate.
No 10474 V.Romasko (Kharkov region)
1st honourable mention Kopnin MT

e6f8 3431.104/4 Draw No 10474 V.Romasko 1.h8Q+ (Sd7+? Kg7;) Qxh8 2.Sd7+, with:
Kg 7 3.Rg1 +Kh 7 4.Rhl +Kg 8 5.Rxh8 +Kxh 8 6.Kxf7 draw, or
$\mathrm{Kg} 8 / \mathrm{i} 3 . \mathrm{Rb} 8+\mathrm{Kg} 7$ 4.Rxh8 Bc4+ 5.Kd6 Kxh8 6.Se5 Rf6+ 7.Ke7 Re6+ 8.Kf8 Rxe5 stalemate/ii.
i) Ke 8 3.Rb8 mate. Or Rxd 7 3.Rb8+ Kg 7 4.Rxh8

Kxh8 5.Kxd7 draw.
ii) $\mathrm{Rf6}+9 . \mathrm{Ke} 7$ draw. Or B- $9 . \mathrm{Sf7}+\mathrm{Kh} 710 . \mathrm{Sg} 5+$ draw.

No 10475 Vitaly Kovalenko (Bolshoi Kamen) 2nd honourable mention Kopnin MT


Win
No 10475 Vitaly Kovalenko 1.Sc3/i Bbl/ii 2.Sxbl a2 3.Sd2 Ka4 (a1Q;Sb3+) 4.Se5 alQ (Ka3;Sc4+) $5 . \mathrm{Bc} 2+\mathrm{Ka} 3:(\mathrm{Ka} 5 ; \mathrm{Sb} 3+) 6 . e \mathrm{Sc} 4+\mathrm{Ka} 2$ 7.Bb3 mate.
i) I.Sb4? BbI! draw. 1.Se5? Bxd5 2.Kxd5? a2, and Black wins.
ii) Be6 2.Se5 a2 3.Sc6+ Ka6 4.Sb4+ and 5.Sxa2.

No 10476 V.Kovalenko
3rd honourable mention Kopnin MT


Win
No 10476 V.Kovalenko 1.g8S $+(\mathrm{g} 8 \mathrm{Q}$ ? h4+;) Sxg8/i 2.Rxh5 + Kg6 3.Bd3+ e4/ii 4.Sxe4/iii Rxg4+ (Bh6;Rxh6+) 5.Kxg4 Sh6+ 6.Kh3 (Kg3? Kxh5;) Kxh5 7.Sg3 mate.
i) $\mathrm{Kg} 62 . \mathrm{Sxf6} \mathrm{~h} 4+3 . \mathrm{Kg} 2 \mathrm{Bxf} 64 . \mathrm{Be} 2$ wins. ii) Kf6 4.Se4+, and Rxe4 5.Bxe4, or K-5.Rxg5. iii) 4.Be4+? Kf6 5.Bd5 Rxg4+ 6.Kxg4 Sh6+ and Bxd2 draw.

No 10477 Sergei Rumyantsev (Omsk) 4th honourable mention Kopnin MT

$\begin{array}{cc}\text { f8g5 } 3141.11 & 5 / 4 \\ \text { No } 10477 \text { Sergei Rumyantsev } & \text { Draw } \\ \text { 1.Se6+/i } & \text { Kxg4 }\end{array}$ 2.Rg5+ Kh3/ii 3.Bfl+ Kh2 4.Rxg6 Qh7 5.Sg5 Qxg6 6.Sf3 +Kh 1 7.Bg2+ Kg2 8.Sh4+ Bxh4 stalemate.
i) 1.Se4+? Kxg4 2.Rg5+ Kf4 3.Rxg3 Qd8+ 4.Kg7 Qd4+ 5.Kh6 Qxe4 6.Rh3 Kg4 wins.
ii) Kf 3 3.Bd5+ and 4.Rxg6.

No 10478 Araz Almamedov (Azerbaidzhan)
1st commendation Kopnin MT


No 10478 Araz Almamedov $1 . e 4+\mathrm{Kg} 4$ (Kg5;f4+) 2.f3+ Kxh5/i 3.b8Q Bh2+ 4.f4 Bxf4+ 5.e5 Bxe5+ 6. Ke6 Bxb8 7. Kf5 h2 8.Bf3 mate.
i) $\mathrm{Kxf3} 3 . \mathrm{b8Q} \mathrm{Bh} 2+4 . \mathrm{e} 5+$.

No 10479 V.Nikitin $1 . \mathrm{h} 5 / \mathrm{i} \mathrm{g} / \mathrm{ii} 2 . \mathrm{f} 4 \mathrm{~g} 4$ 3.Kg3 Ke3 4.Kh4 g3 (Kxf4;g3+) 5.Kxg3 Ke4 6.Kh4 Kxf4 7.g4 fxg4 (Ke5;g5) stalemate.
i) Otherwise Black will simply capture the f6 pawn.
ii) gxh5 2.Kg3 Ke3 3.Kh4 Kf2 4.Kxh5 Kxg2 5.Kxh6 Kxf3 $6 . \mathrm{Kg} 7 \mathrm{Kg} 2$ draw.

No 10479 V.Nikitin (Borovichi)
2nd commendation Kopnin MT


Draw
No 10480 Boris Vovilov (Chelyabinsk) 3rd commendation Kopnin MT

f8c8 $0032.124 / 4$
Draw
No 10480 Boris Vovilov 1.dxe4/i Bxh7/ii 2.Kg7/iii Bxe4/iv 3.Sa6 bxa6/v 4.Kf6 a5 5.Ke5 a4 6.Kd4 a3 7.Kc3 Bds 8.Kc2 Ba2 9.Kc3 (Kc1? Kc 7 ;) $\mathrm{Bc} 410 . \mathrm{Kc} 2 \mathrm{Ba} 2$ 11.Kc3 $\mathrm{Bb} 1 \mathrm{~B}_{12 . \mathrm{Kb}} \mathrm{a} 2$ $13 . \mathrm{Kb} 2$ draw
i) $1 . \mathrm{d} 4$ ? e3 $2 . \mathrm{Sg} 5 \mathrm{Bg} 4$ 3.d5 e2 4.Sf3 Bxf3 5.d6 elQ 6.d7+ Kd8.
Or 1.Sd7? Kxd7 2.Sf6+ Ke6 3.dxe4 Kxf6 4.exf5 bs.
Or 1.Sa6? bxa6, and 2.Sg5 e3 3.Sf3 a5, or 2.dxe4 Bxh7 3.Kg7 a5/vi 4.Kxh7 a4 5,e5 Kd7 6.Kg7 Ke6 wins.
ii) Bxe4 2.Sf6 Bf5 3.Se8 K b8 4.Sd6 draw. Certainly not Kxb8? 2.exf5 b5 5.Ke7 b4 4.f6 b3 $5 . f 7$ b2 6. $88 \mathrm{Q}^{+}$, and White win Nor b5? either: 2.exf5 b4 3.Sc6 b3 4.Sa7+, fllowed by $5 . \mathrm{Sb} 5$ and $6 . \mathrm{Sc} 3$, winning.
iii) $2 . \mathrm{Sa6}$ ? bxa6 3.Kg7 a5.
iv) $\mathrm{Kxb8} 3 . \mathrm{Kxh} 7 \mathrm{~b} 54 . \mathrm{e} 5 \mathrm{Kc} 75 . \mathrm{Kg} 7$ draw. Or if b5 3.Kxh7 b4 4.Sc6 b3 5.Sa7+ Kd7 6.Sb5 b2 7.Sc3 Ke6.
v) b6 4.Kf6 Kb7 5.Sb4 b5 6.Ke5 Bh7 7.Kd4 Kb6 8.Kc3 draw, "with wS flitting from b4 like a
metronome to a2, a6, c2, c6, d3, d5 - and back again." Or b5 4.Kf6 Bb7 5.Sb4 Kc7 6.Ke5 Kb6 7.Kd4 Ka5 8.Kc3 draw.
vi) $3 \ldots$...Bxe4? 4.Kf6, drawing as in the main line.

Israel 'ring', 1987
This informal tourney was judged by Lars Falk (Sweden).
The provisional award was published in VARIANTIM No. 6 (ix-xii89). 12 studeis competed.
"The solvers have obviously done a fine job: only one incorrect study was discovered, in spite of the analytical help I received from GM Harry Schussler. We are indebted to Hillel Aloni for providing us with excelent solutions and to Brian Stephenson, who kindly checked with the Harman index; no obvious anticipations were, however, discovered among the honoured studies."
"..... 538 by Anders Gillberg (Sweden), .... would have deserved a prize for the light play ending in two unusual stalemates. However, a side variation leads into an ending which was difficult to analyse to a definite result. For the first time in my practice, I appealed to a database constructed at the University of Limburg by Prof. H.J.van den Herik, Sito Dekker and Patrick Schoo. ..." [See 2HM for 1989 Israeli Ring tourney.]
"Let me add that unlike some other study composers 1 see no conflict between humans and computers. Studies are composed for their artistic value, i.e. the subjective appeal of their ideas to chessplayers. Computers on the other hand treat all positions on equal terms and are therefore best qualified to judge positions objectively. Gillberg should anyway have eliminated the unclear position, since it reduces the artistic value of the study."
"My main criteria have been originality, the technical quality and the artistic impression created by the studies. The distribution of the prizes did not cause any difficulties: the first and second prizewinners are outstanding. I may have been too lenient towards the end of the list, but even these studies contain some interesting points."

For the 1st prize, by Noam Elkies (Israel and USA) - published as No. 333 in Shahmat - see EG105, p72. "A beautiful study constructed with effortless technique. The castling theme appears in several variations and it is also reinforced in the tries. The mating position is found in a study by Pogosyants (EG56, pl49), but that study is only an aperitif to Elkies' prizewinner."

No 10481 Yehuda Hoch (Israel)
2nd prize Israel 'ring', 1987

b5h5 $0532.035 / 6$
No 10481 Yehuda Hoch 1 ...Bc4+ Win
2. Kxc4 9 g 3.Rd4 Rxd4 (Rxh2;Se2) 4.Kxd4 g2 5.Se2/i gxh1Q/ii $6 . \mathrm{Sg} 3+\mathrm{Kh} 4$ 7.Sxhl Kh3 8.Sf3 Kg2 9.Ke3 Kxhl 10.Kf2 h5 11.Kfl(Kg3) h4 12.Kf2 h6 13.Kf1 h5 14.Kf2 h3 15.Kf1 h4 16.Se5 Kh2 17.Kf2 Kh1 18.Sg4 h2 19.Kf1 h3 20.Sf2 mate. i) $5 . \mathrm{Sfl}+? \mathrm{gxh} 1 \mathrm{~S} 6 . \mathrm{Ke} 3 \mathrm{Kg} 47 . \mathrm{Se} 2 \mathrm{~h} 5$ draw.
ii) gxh1S 6.Ke3 Kh4 7.Kf3 Kh3 8.Sf1 h5 9.Sg1+ $\mathrm{Kh} 410 . \mathrm{Kg} 2$ wins.
"A study passing through several metamorphoses before White reaches a position where he can mate with a single knight. The choice of knight moves is particularly deep. My only objection is that the initial position is rather forced."

No 10482 † I.Krikheli (Georgia)
honourable mention Israel 'ring', 1987

g3b3 0340.10 3/3
Draw
No 10482 † I.Krikheli 1.Bd4 Rd6 2.Be5 Rd5 3.Kxg4/i Rxe5 4.h4 Kc4 5.h5 Kd5 6.h6 Rel 7.Kf5/ii Rhl 8.Kg6 Ke6 9.Kg7 Ke7 (Rgl+;Kf8) $10 . \mathrm{h} 7 \mathrm{RgI}+11 . \mathrm{Kh} 8$ draw.
i) 3.hxg4? Rxe5 4.Kf4 Rel wins.
ii) 7.Kg5? Ke6 8.h7 Rgl+ 9.Kh6 Kf7 10.h8S + Kf6 wins.
"The regretted Georgian master, who recently died over the chessboard, has created a compen-
dium of theoretical positions. Nothing is new, but the way the positions are linked together is admirable."

No 10483 A.Grinblat (Israel)
commendation Israel 'ring', 1987

h1f8 4001.36 6/8
Draw No 10483 A.Grinblat 1.Sxg6+ Qxg6 2.Qc5+/i Kg8 3.Qc8+ Kh7 4.Qc2 Kh8 5.Qc8+ Qg8 6.Qb8 Kh 7 7.Qbl+ Qg6 8.Qc2, positional draw. i) 2. Kxh2? Kg 8 3. $\mathrm{Kxh} 3 \mathrm{Qg} 4+$ and Kh 7 .
"A simple study with an ugly knight at h8, but still some nice stalemates."

No 10484 Gregor Werner (West Germany) commendation Israel 'ring', 1987

$\begin{array}{rr}\text { c5e5 } 0310.012 / 3 & \text { Draw } \\ \text { No } 10484 \text { Gregor Werner 1.Bh4/i Rb7/ii } & 2 . K c 6\end{array}$ b4/iii 3.Kxb7/iv b3 4.Bel Kd4 5.Bh4 Ke5 6.Bel draw.
i) $1 . \mathrm{Bd} 6+$ ? Ke6 $2 . \mathrm{Bf} 4$ b4 wins. Or 1.Bd8? Rd7
2.B- Rd5+. Or 1.Bf8? Rg8 2.Bd6+ Ke6, and 3. $\mathrm{Bf} 4 \mathrm{b4}$, or 3 . Bh 2 Rg 5 .
ii) b4 2. Bel b3 3.Bc3+.

If Rg4 2.Bel Re4 3.Bc3+.
iii) $\mathrm{Rb} 83 . \mathrm{Bg} 3+\mathrm{Ke} 44 . \mathrm{Bxb} 8 \mathrm{~b} 45 . \mathrm{Bd} 6$ draw.
iv) Or the inversion 3.Be1 Rb8 4.Kc7 Rb5 5.Kc6 $\mathrm{Kd4}$, as main line.
"Very nice and accurate play; the final position, however, is well known."

No 10485 A.Grinblat
commendation Israel 'ring', 1987


Draw
No 10485 A.Grinblat $1 . \mathrm{b7}$ ( $\mathrm{Bg} 7+$ ? Ke 7 ;) Sxb7 2.Bf6 Se4+ 3.Kh6 Sxf6 4.e7+ Kg8 5.Rg7+ Kh8 6.Rh7+ Sxh7 7.e8Q(e8R)+ Qxe8 stalemate.
"A lightweight study with forced play."
Israel 'ring'. 1989
This informal tourney was judged by Ofer Comay (lsrael)
"I received 21 compositions for adjudication, Let me on this occasion thank the solvers, and especially Mr Hillel Aloni for his work in collecying and checking."

No 10486 Albert van Tets (South Africa)
1st prize Israel 'ring'. 1989


## f2h3 $0410.124 / 4$

Win
No 10486 Albert van Tets 1.Rc3+/i Kh4/ii 2.Bh6/iii Kh5 3.Bg7/iv Rxg7/v 4.Rcl g5 5.f5 g3+ 6.Kxg3 g4 7.Kf4 wins.
i) 1.Rcl? g3+ 2.Kf3 g2. 1.Rc6? Rf7 2.Bh6 Ra7 3.Rxg6 Ra2+. 1.Bc5? Rc7 2.Rc1 Kh2 3.Kfl Rf7 4.Rc2+ Kh1 5.Rf2 g3, draw.
ii) Kh2 2.Rc6 g3+/vi 3.Kf3 g2 4.Rxg6 g1S+ 5. $\mathrm{Ke} 3 \mathrm{f5}$, and Bl wins.
iii) 2.Rcl? g3+. 2.Kf3? Rd3+ 3.Ke4 Rd2. 2.Rc6? Rd3 3.Bh6 g3+ 4.Ke2 g2. 2.Re3? g3+ 3.Kf3 g5 4.Be7 Kh3 5.Bxg5 g2 hiRel Kh2, draw.
iv) 3.Bg5? Rd2+4.Kel g3, and 5.Rxg3 Re2+, or 5.Kxd2 g2 6.Rcl glQ 7.Rxgl, or 5.Bh4 Rd4 6.Bxg3 Kg4 7.Bh2 g5 draw.
v) $\mathrm{g} 3+4 . \mathrm{Kxg} 3$. Or g5 4.f5. Or Rf7 4.Rc5+ Kh4 5.Be5 g 5 and $6 . \mathrm{Bc} 7$ wins.
vi) Rf7 $3 . \mathrm{Bd} 6 \mathrm{~g} 3+4 . \mathrm{Kf} 3 \mathrm{~g} 55 . \mathrm{Be} 5$ wins.
"At the outset W is a piece up, and Bl has no immediate threat. Nevertheless, W has to pick his first two moves meticulously, which leads us to the central idea. The try 3.Bg5? is defeated by a stalemate combination. In the solution, W sacrifices a piece: $3 . \mathrm{Bg} 7!!$ and mates after a few quiet moves. An original and unusual study."

No 10487 I.Porat (Istael)
2nd prize Israel 'ring'. 1989

b3bl 0004.11 3/3
Draw
No 10487 I.Porat 1.Sf3/i Scl+ 2.Ka3/ii Sd3/iii 3.f6/iii Kcl/iv 4.f7 blQ 5.f8Q Qb2+ 6.Ka4 Qb6 7.Se5 Sc5+8.Qxc5+ Qxc5 9.Sd3+ draw.
i) $1 . \mathrm{Sfl}$ ? $\mathrm{Scl}+2 . \mathrm{Ka3} \mathrm{Sd} 33 . f 6 \mathrm{Kcl} 4 . \mathrm{f} 7 \mathrm{blQ}$ 5.f8Q Qb2+ 6.Ka4 Qb6 wins.
ii) 2.Kc3? $\mathrm{Ka} 23 . \mathrm{Sd} 2 \mathrm{Sb} 3$ wins.
iii) Kc2 3.Sd4+Kc3 4.Sb5+ wins.
iv) 3.Sd4? Sb4 4.Sb5 Kcl 5.Sc3 Sd5 6.Se2+ Kbl 7.Sd4 Se3 wins.
"In the initial position there is a thematic try 1.Sf1?, defeated after long play and a quiet move 6...Qb6!! by BI. the key l.Sf3! anticipates the final combination 7. Se5!!, after the same [;ay. An excellent miniature."

No 10488 Hillel Aloni 1.Re2 Qxe2/i 2.Sb4+ Kb6 3.Sd7+ Ka5/ii 4.Bc7+ Kxb4/iii 5.Ba5 + Kxa5 6.b4+Kxb4 7.Qa3+Kc4 (Ka5;b4 mate) 8.Qxc5+ Kd3 9.Qc3+ Ke4 10.Sf6+ Kf4 11.Qg3+ Kg5 $12 . \mathrm{f4}$ mate.
i) Qdl $2 . \mathrm{Se} 7+\mathrm{Kb6} 3 . \mathrm{Qe}$ wins. Bxf2 2.Se7+ Kb6 3.Sd7+ Kas 4.b4+ Kxb4 5.Qa3+ wins.
ii) $\mathrm{Ka} 74 . \mathrm{Bb} 8+\mathrm{Ka} 85 . \mathrm{Sb} 6$ mate.
iii) Rxc7 5.Qxc7+ b6 6.Qxb6+ Kxb4 7.Qc5+ Kxb3 8.Qc3+.
"In this wild position the play starts with a quiet
sacrifice l.Re2!!, followed by a long sacrificial line, which ends in echoed mates on opposite sides of the board. An impressive achievement, making up for the heavy construction and almost entirely forced Bl moves."

No 10488 Hillel Aloni (Israel)
3rd prize Israel 'ring'. 1989


No 10489 Vazha Neidze (Georgia) and H.Aloni 1st honourable mention Israel 'ring'. 1989


Win
No 10489 Vazha Neidze and H.Aloni 1.57 Qe7+/i 2.Sd6+ Kd8 (Kb8;c7+) 3.c7+/ii Qxc7+ 4.Sc6+ $\mathrm{Kd7} 5 . \mathrm{f8S}$ mate.
i) Qh5+ 2.Sd5 Qf3 3.Sd6+ Kb8 4.c7+ Ka7 5.c8R wins.
Or Qd8 2.Sd6+ Kb8 3.Sd5 Qa5+4.Sb5 wins.
Or Qh6 2.Sd5, and Qcl+ 3.Kd6 Qa3+ 4.Ke6
Qh3+ 5.Ke7 Qh4+ 6.dSf6+, or Kd8 $3 . \mathrm{Sg} 5 \mathrm{Kc} 8$
4. Kb5 Qd6 5.f8Q+ Qxf8 6.Sb6+ wins.
ii) 3.Sd5? Qa7+ 4.Kb5 Qc5+ draw.
"A miniature terminating in a model mate with S-promotion and Bl self-block."

No 10490 Anders Gillberg (Sweden) 2nd HM. Israel 'ring'. 1989

a8c5 $0331.204 / 3$
No 10490 Anders Gillberg $1 . b 7$ Bf4 2.Se4+/i Kc6/ii 3.Sd6/iii Bxd6/iv 4.b8Q Bxb8 5.d8Q (d8R? Bd6;) Rxd8 draw.
i) $2 . \mathrm{b} 8 \mathrm{Q}$ ? Bxb8 $3 . \mathrm{Kxb8} \mathrm{Rxd} 7$ wins.
ii) Kb6 3.b8Q+ Bxb8 4.Kxb8 Rxd7 5.Kc8 Kc6 6.Sf6 Rf7 7.Se8 draw.
iii) 3.b8Q? Bxb8 4.Kxb8 Rxd7 draw.
iv) $\mathrm{Ral}+4 . \mathrm{Kb} 8 \mathrm{Kxd} 7$ draw.
"Another elegant miniature, comprsing a 'Novotny' and two stalemates. The Novotny is not real, because the interference with bR is not utilized if, for instance, bB stood on h2 instead of f4 (after the first move) W could also play $3 . \mathrm{Sg} 3$ (instead of 3.Sd6) with the same sequel."

No 10491 A.Grinblatt (Israel)
Ist commendation Israel 'ring'. 1989


Win
No 10491 A.Grinblatt 1.Sc6+/i dxc6 2.Kc5 Rb8/ii 3.a7 Ra8 4.Bxc6 Rxa7 5.Bb5 and 6.b4 mate.
i) 1.Sb5? Kxa6 2.Kc5 Ka5 3.Sc3 d6+ 4.Kc6 Rxb3 draw.
ii) Rb6 3.a7 Ra6 4.Bxc6. Ot Rh4 3.a7 Rh8 4. Bxc6.
"Simple play ending in a likeable position of inevitable mate."

No 10492 Leonard Katsnelson (Rusisia)
2 comm. Israel 'ring'. 1989

h3h5 4031.11 4/4
Win No 10492 Leonard Katsnelson 1.Se6 Qxd7/i 2.Qh2 Qxe6+/ii 3.Kg3+ Kg5 4.Qh4+ Kf5 5.Qf4 mate.
i) c2 2.d8Q Bf5 $+3 . \mathrm{Kg} 3 \mathrm{Qg} 6+4 . \mathrm{Kf} 2$ wins. Or Bf5 $+2 . \mathrm{Kg} 2$ and Qg6+ 3.Kf2 Rxe6 4.d8Q, or Be4+ 3.Kf2 Qxd7 (Qf5+;Sf4+) 4.Qe5+, or Qxd7 3. Qh2+ Kg6 Sf8+.
ii) Qd3+ 3.Kg2+ Kg4 4.Qf4+. Or Qd2 3.Qe5+ Kh6 4.Qg7+ Kh5 5.Qh8+ Qh6 6.Qe5+ wins.

No 10493 Benjamin Yaacobi (Israel)

f1d2 $0400.113 / 3$
Draw No 10493 Benjamin Yaacobi 1.Kg1 Rh7 2.Kg2 Rg7+/i 3.Kf3/ii Rc7 4.Rd8/iii Kc2 5.Ke4 Re7+ 6.Kf5/iv d2 (Rf7+;Ke4) 7.Kg6/v Ke8 8.Rxd2+ Kxd2 9.f4 Ke3 10.f5 Kf4 11.f6 Ke5 $12 . \mathrm{f} 7$ draw. i) Rc7 3.f4 Kc2 4.Kf3 d2 5.Rd8 draw. ii) 3.Kh3? Rc7 4.f4 Kc2 5.Kg4 d2 6.Rd8 Rc3 7.f5 Rd3 8.Rc8+ Kb3 9.Rb8+Kc4 $10 . \mathrm{Rbl}$ d1Q+ wins. iii) 4.Kg4? Rc4+ 5.f4 Kc3 6.Rd8 d2 7.Kf3 Kc2 8.Ke2 Re4+ 9.Kf3 Rel 10.Rc8+ Kb3 11.Rd8 $\mathrm{dlQ}+$ wins.
iv) $6 . \mathrm{Kf4}$ ? d2 7.Rc8+ Kdl wins.
v) 7.Kf6? Re8. Or 7.f4? Re3 8.Rxd2+ Kxd2 wins.

PHENIX, 1991-93
This informal tourney was judged by Jean Roche. The provisional award was published in PHÉNIX 34 (x95).
"... Not a single French study in this 3-year period! And yet it has come to your faithful servant to select two prizes and three honorable mentions in this desert that was at one time the country of Rinck, Halberstadt, Chéron, Lazard, Villeneuve-Esclapon...."
"... an avalanche of demolitions, no solutions, duals 'rhedibitoires', and from the most prestigious of sources. And this is not exceptional, it seems. Hooray for the solvers, but we should take thought. I do not believe that composers have become less conscientious, so I am inclined to place the blame on the general tendency towards complex introductions, a tendency that, besides, presents a deterrent to a fair number of potential enthusiasts."
"It remains to judge the survivors. Just one study turned me on."
18 studies were listed.
.............
No 10494 Andrzej Lewandowski (Poland)
first prize PHENIX, 1991-93


No 10494 Andrzej Lewandowski 1.Qdi+/i Kh4/ii 2.Qd4+ Sg4 3.Qh8+/iii S4h6/iv 4.Qd4+ Sg4/v 5.Qh8+ S8h6 6.Qxe8 Rxe8 7.Bxa5 Rc8+ 8.Kb3/vi Rxcl 9.Bd8+ Kh5 10.Se2 Rbl+ 11.Kc2/vii Rb4 12.Kc3/viii Ra4 13. Kb3 draw.
i) 1.Qxe8? Rxe8 2.Bxa5 Rc8+
ii) Kg5 2.Qd5+ Kh6 3.Qd2+ Kg6 4.Qg2+ Kf7 5.Qg7+ Ke6 6.Qe5+Kd7 7.Qd5+Ke7 draw. iii) $3 . \mathrm{Sf} 3+$ ? Kg 3 4. $\mathrm{Qg} 1+\mathrm{Kxf3} 5 . \mathrm{Qh} 1+\mathrm{Kg} 3$ 6.Qg1+ Kh4 7.Qhl+ Kg5 8.Qd5+ Se5+ 9.Bxe5 Qa4+.
iv) Kg 5 4.Sf3 $+\mathrm{Kf5} 5 . \mathrm{Qh} 7+\mathrm{Kf4}(\mathrm{Qg} 6 ; \mathrm{Sh} 4+$ ) 6.Sd3+, and Ke3 7.Bd4+ Ke2 8.Sg1+ Kd2 9.Sf3+ Kd1 $10 . \mathrm{Sb} 2+$, or Kg 3 7.Qh4+ Kxf3 8.Qh3+ (and Qxg4).
v) Kg5 5.Sf3+ Kf5 6.Sh4+ draw. Or Kh5 5.Qd5+ Kg6 6.Qg2+ draw.
vi) $8 . \mathrm{Kd} 3$ ? Rxcl 9.Bd8+ Kh5 $10 . \mathrm{Se} 2 \mathrm{Rd} 1+$ wins. vii) 11.Ka2? Rb4 12.Ka3 Rc4 13.Kb3 Se 3 $14 . \mathrm{Sg} 3+\mathrm{Kg} 4$ 15.Sf1 Re4 wins.
viii) $12 . \mathrm{Be} 7$ ? $\mathrm{Se} 3+13 . \mathrm{Kd} 2 \mathrm{Sfl}+$.
"The taboo piece theme is classic: an enemy piece can be taken fairly promptly, to secure a decisive material advantage, but the capture must be delayed under penalty of a mate, stalemate or devastating counter-attack. All one can do is temporise, until the conditions for capture are right. See (i). On the other hand, if the black queen is not taken, there is no way to keep her in our sights. So we embark on a series of checks, apparently without prospects, and now, at move 6, against all expectation, we take the queen after all and, in spite of the same black riposte, there are enough resources to scrape up a beautiful perpetual."

No 10495 Kozma Osul (Moscow)
second prize PHÉNIX, 1991-93


Draw
No 10495 Kozma Osul 1.f7 S4b6+/i 2.Kd8 Kg7 3.Bxb2 cxb2 4.f6+ Kxf7 (exf6;f8Q+) 5.fxe7 b1Q (Sc7;e8Q + ) 6.e8Q $+\mathrm{Kf6}$ 7.Qe7+ Kg6 8.Qe4+ Qxe4 stalemate.
i) $\mathrm{Kg} 72 . \mathrm{Kxe} 7 \mathrm{bxc} 1 \mathrm{Q} 3 . \mathrm{f8Q}+$. Ot $\mathrm{S} 8 \mathrm{~b} 6+2 . \mathrm{Ke} 8$. Or Sc5+ 2.Kxe7.
"The introduction displays no great technical mastery, but the order of White's moves is precise - White's move 4 is delicious, seeing that the stalemate is still in the distance. Above all, three different model mates." Osul, a strong trainer-player, accompanied the Russian solvers to Bonn and to to Belfort.

No 10496 Leopold Mitrofanov and Aleksey Sochniev (St Petersburg)
honourable mention PHÉNLX, 1991-93

d3a3 0164.12 4/6
Win No 10496 Leopold Mitrofanov and Aleksey Sochniev 1.f7 Bd6 2.Sxd6 f2 3.Sc4+ bxc4+ (Ka2;Se3) 4.Kc3 flQ 5.f8Q +Ka (Qxf8;Ra7+) 6.Qa3+ Kxa3 7.Ra7+ Sa5 8.Rxa5 mate.
"Another vicissitudes study, but in more classic form. Each side sacrifices a piece to improve their promotion settings. The sacrifice of the white knight piquantly allows its capture with check. Even the white queen is abandoned. However, Gorgiev (1st prize, Shakhmaty v SSSR, 1956) did better in this style (though his study is not in the FIDE Albuni) by sacrificing half of the force present. And there is always Mitrofanov's own immortal Vecherny Leningrad top placement in 1971."

No 10497 Janusz Skrzek (Poland) commendation PHÉNIX. 1991-93

f4h8 0334.68 8/12
Win
No 10497 Janusz Skrzek 1.e7/i Bbs 2.bxc7 Rxc2 3.Sc6 Rf2+ 4.Kg4 Be2+ 5.Kh4 Rf4+ 6.Kxh3 Bg4+ 7.Kg2 Re4 8.Sd8 gxh6 9.Se6 win.
i) 1.bxc7? Rxc2 2.e7 Rc4+.
"Two successive Novotny interferences on the same black pieces but on different squares, aiming at the two same white pawn promotions: far har-
der with a white knight than with a white rook Nevertheless the study is heavy and laborious, suffering by comparison with similar efforts using a rook. L.Zoltan produced three consecutive Novotny's (1st prize, Magyar Sakkélet, 1958), and there is Kasparyan's perpetual Novotny (to draw, of course), one of the Armenian composer's best, and hence one of the best ever, (1st prize, in Shakhmaty v SSSR, 1959)."

No 10498 Leonid Topko (Ukraine) comm. PHÉNIX, 1991-93
 Win
No 10498 Leonid Topko 1.Rg6+ Kf7 2.Rf6+ Ke7 3.Bc5+/i Kxf6 4.Bd4+ Kg5 5.Sf3+ Kg4 6.Sh2+ $\mathrm{Kg} 37 . \mathrm{Kg} 1 \mathrm{R}-8 . \mathrm{Bf} 2$ mate.
) 3.Bf2? Kxf6? 4.Bd4+, would be the main line but Black has h2 $4 . \mathrm{Kg} 2 \mathrm{~h} 1 \mathrm{Q}+5 . \mathrm{Kxh} 1 \mathrm{Kxf6}$.
"A simple study entailing an (elementary) sacrifice of the white rook, a systematic manoeurre (also elementary), and a banal model mate with a black rook that is taboo for three moves (while the white knight is made safe). The composer's given 8.Be5+, is redundant, seeing that $8 . B \times h 8$, is an easy win: so the solution ends as we give it."

## Shakhmatnaya kompozitsia

This informal tourney was judged by Oleg Pervakov. The provisional award was published in No. 11 "1995". 39 studies published from 34 composers. Some in-time corrections are mentioned in the award and incorporated here.

No 10499 An.Kuznetsov and K.Sumbatyan (Moscow) prize Shakhmatnaya kompozitsia


No 10499 An.Kuznetsov and K.Sumbatyan 1.Qd2!i Rxb7/ii 2.Rxh5+! Kxh5 3.g4+ Kh6/iii 4.g5 + Kh5 5.Qg2 f5 $6 . \mathrm{h} 3$ (gxf5? Qxf6+;) Rb8+ 7. $\mathrm{Kg} 7 \mathrm{Rg} 8+8 . \mathrm{Kxg} 8 / \mathrm{iv} \quad \mathrm{Qc8}+9 . \mathrm{Kf7} \mathrm{~d} 6 / \mathrm{v}$ position after 9...d6

10.Ke7/vi a4/vii 11.c4/viii c5 (c6;Qg4+) 12.dxc6 Qc7+ 13.Ke6 Qc8+ 14.Kd5 Qg8+ 15.Kd4 QdS + 16.Kc3, and the white king escapes the checks.
i) White ignores the dire threats to his own king in the interests of setting up subtle threats against the opponent's. There is this (if it were now WTM): 2.Qd4 f6 3.Qe4 fxg5 4.Qe5 gxf4 5.Qxf4+ g5 6.Qf7, for mate. Note, not 1.Qc2? f5, after which neither: 2.Rxh5+? Kxh5 3.g4+ Kh6/ix 4.g5+ Kh5 5. Qg2 Qxb7 6.h3 Qc8+ 7.Kg7 d6, nor 2.Rxf5 Rxb7 3.Rf8 Qf6+ 4.Rxf6 Rb8+, offers salvation, let alone victory.
ii) Qxb7 2.Rxh5+ Kxh5 3.g4+, with the 'en passant' continuation hxg3 4.hxg3 Rb2 5.Qel g5 6.f5, and g4 7.f4 Rh2 8.Qe7, or Rh2 7.g4+ Kh6 9.Qe8 - or Black can dodge this by choosing 3...Kh6 4.g5+ Kh5 5.Qg2 Qc8+ 6.Kg7 d6 7.h3 f5 8.gxf6 Qd7+ 9.f7, this time en passant to White! What a theme! And it's only the start.
iii) Black preserves his queen, as can be seen
from the alternative: hxg 3 4.hxg3 g5 5.Qh2 +Kg 6 6.Qh7+ Kf6 7.Qh6+ and 8.Qxa6
iv) 8.Kf7 Rf8+ 9.Kxf8? Qd6+ 10.Ke8 Qxf4, and there is no more than a draw.
v) In a fine echo of White's first move Black defends against the threat (wQg4+!).
vi) $10 . \mathrm{Qe} 2$ ? c5, and $11 . \mathrm{Qe} 7 \mathrm{c4} 12 . \mathrm{Qxd6}$ Qc7+ 13.Qxc7 a4 and stalemate, or 11.dxc6 Qxc6 12.Qe7 Qxf3 13.Kg7 Qxf4 14.Qf8 Qe5+ 15.Qf6 $\mathrm{f4}$, and Black is OK , even preserving his f-pawn. vii) It is too soon for c5 11.dxc6 a4 12.Qg4+. But the stalemate possibilities allow Black to fight on. viii) Why not $11 . \mathrm{Qg} 1$ ? [The '?' here conveniently serves a double purpose.] c5 12.dxc6 $\mathrm{Qc} 7+$ 13.Ke6 Qc8+ 14.Kd5 Qg8+ 15.Kd4 Qd5+ for stalemate, with the spice of $16 . \mathrm{Ke} 3$ ? Qc5+!
ix) fxg 4 ? $4 . \mathrm{Qg} 2 \mathrm{~g} 35 . \mathrm{Qh} 3 \mathrm{~g} 56 . \mathrm{Qg} 4+\mathrm{Kg} 67 . \mathrm{Kg} 8$ and mates.
"Not just highly original but a record presentation of white and black en passant content. Right away I must answer sceptics pointing accusing fingers at the large number and great power of the chessmen in evidence. In numbers there are three miniatures-worth, all of them alive and kicking throughout the solution. There are deep ambushes by both queens, reciprocating sacrifices by both rooks, play for mate, stalemate and perpetual check far from the textbooks, interesting clashes in the wings, all of them strong melodies yet at the same time beginning to sound right from the first move, embellishing the authors' idea and underlining its perception. I am sure that this production would have delighted the unbridled wizard of the study V.Korolkov, in whose work the idea always took precedence over the material."
No 10500 A.Golubev (Yaroslavl region)
2nd prize Shakhmatnaya kompozitsia

g8h6 0001.22 4/3 Win No 10500 A.Golubev 1.Sd6/i e2 2.Sf7+ Kh5 3.Se5 elQ/ii $4 . \mathrm{g}^{+} \mathrm{Kg} 5(\mathrm{Kh} 4) \quad$ 5.Sf3 +Kxg 4 6.Sxel Kf5 7.Kf7 (Sc2? Ke6;) g5 8.Sc2 g4/iii 9.Se3+ Ke4 10.d5 Kxe3 11.d6 g3 12.d7 g2
13. d 8 Q giQ $14 . \mathrm{Qb} 6+$ and $15 . \mathrm{Qxg} 1$ wins. i) $1 . \mathrm{Sf6}$ ? e2 2.Sg4+ Kg5 3.Se5 Kf5 4.Sf3 Ke4 5.Kf7 g5 6.Sel g4 7.Ke6 Kxd4 8.Kf5 Ke3 9.Kxg4 Kf2, and it's a draw.
ii) What if Black promotes to knight? This is most simply met by: (e1S) 4.d5, with either Sxg2 5.d6 Sf4 6.Kf7, or Sc2 5.d6 Sd4 6.g4+ Kg5(Kh4) 7.Sf3+ Sxf3 8.d7.
iii) Ke4 9.Ke6 g4 10.d5 g3 11.Sel.
"An elegant miniature with subtle play that flows lightly and without constraint. Even if the idea is not so new the overall effect is one of originality."
No 10501 V.Kovalenko (Maritime region)
3rd prize Shakhmatnaya kompozitsia

e8e5 $0000.455 / 6$
Win
No 10501 V.Kovalenko 1.a4/i Kd4/ii $2 . b 4$ (Kd7? Kc3;) Kc4 3.a5 bxa5 4.bxa5 Kb5 5.Kd7/iii Kxa5 6.Kc6/iv Kb4 7.Kd5 Kc3 8.Ke4 Kd2 9.Kf3 Kel 10.Kxe3 Kfl 11.Kf3 Kg1 12.e4 Kh2 13.Kf2 Kh1 14.e5 h2 15.e6 h3 16.e7 h4 17.Ke2/v Kgl 18.e8Q h1Q 19.Qe3+ Kh2 20.Qf4+ Kg2 21.Qf2 mate. i) 1.b4? b5. Or 1.Kd7? Kd4 2.Kc6 Kc3, after which queens appear one after the other.
ii) Réti! If Kd5 2.Kd7 Kc5 (Kd4;b4) 3.Kc7.
iii) "The central moment. Cannot White penetrate to e3 via the infantryman on h5? Let us see: 5.Kf7? Kxa5 6.Kg6 Kb4 7.Kxh5/vi Kc3 8.Kg4 Kd2 9.Kf3 Kel 10.Kxe3 Kf1 11.Kf3 Kg1 $12 . e 4$ Kxh2, and Black is stalemated thanks to the absence of the h5 pawn!"
iv) "This nudge is not expendable: 6.Kd6? Kb6 7.Kd5 Kc7 8.Ke4 Kd6, and Black has taken the opposition."
v) "The final stitch. The e3 square is reserved for the queen. 17.Ke3? Kg 1 18.e8Q h1Q, and the win has gone for ever."
vi) 7.Kf5 Kc5 8.Kg5 Kd4 9.Kf4 Kd5 10.Kxe3 Ke 5 , is a clear draw.
"The droll altematives facing White on move 5, between pairs skating (5.Kd7!) and the individual version ( $5 . \mathrm{Kf7}$ ), is resolved in favour of the former. The argument is conducted with clarity
and an even temper."
No 10502 A.Lewandowski (Poland) 4th-5th prize Shakhmatnaya kompozitsia


Draw
No 10502 A.Lewandowski 1.Kd5/i Ba5 2.Sb4+ Kb 3 /ii $3 . \mathrm{Sc} 6 / \mathrm{iii} \mathrm{Rb} 5+4 . \mathrm{Kd} 6 / \mathrm{iv}$ Rb6 5.a7/v Ra6 6.Kd7 Bb6 7.Kc8 Bxa7 8.Kb7 Rb6+ 9.Kc7 Ra6 $10 . \mathrm{Kb7}$, positional draw, the black king now being over the horizon.
i) 1.a7? Bc3+ and bRa8.
ii) Since Bxb4 3.Kc6 Ba5 4.a7 Rb6+ 5.Kc7, does not work for Black, he chooses something else.
iii) 3.Kc6? Rb6+4.Kc5 Rxb4 5.a7 Bb6+.
iv) 4.Ke4? Bb6 5.a7 Bxa7 6.Sxa7 Rc5 7.Kd4 Kb4, and White parts with his last major property.
v) "The attempt to extract a dividend from the shaky position of $b R$ and $b B$ ends in bankruptcy." 5.Kc5? Rxa6 6.Kb5 Rb6+ 7.Kc5 Ka4-bK is too close (see main line).
"The airy setting, the refined play, a bright sacrifice, a complete echo variation, and mutual black-white dominations - they leave their impression all right. But the finale is not all that fresh, seeing that the composer has already shown it twice before, in Tidskrift för Schack (1990), and in Mat-Pat (1992)."
No 10503 G.Amiryan (Erevan) 4th-5th prize Shakhmatnaya kompozitsia

ala7 1330.11 3/4

No 10503 G.Amiryan 1.b6+ Ka8/i 2.QdS/ii Rg6/iii 3.Qd8+ Bb8 4.Qd4 Be5 5.Qxe5 Rxb6/iv 6.Qh8+ Ka7 7.Qd4 Ka6 8.Qa4 mate.
i) Ka6 2.Qf1+ Kas 3.Qf5+ Ka4 4.Qc2+, and bR's life is ended.
ii) 2.Qh8+? Bb8 3.Qxg7 Be5+ 4.Qxe5, a fine stalemate resource.
iii) The threat was $3 . \mathrm{Qd} 8+\mathrm{Bb8} 4 . \mathrm{Qd} 4$. If Rg 4 3.Qa2+ Kb8 4.Qe6 Ra4+ 5.Kb2 Ka8 (Rb4;Ka3) 6.Qe8+
iv) "Black stands just one move (Ra6; or Rc6;) from a familiar draw, but White has his say first." "Again with a familiar mating finale, preceded by pleasant play with high quality study nuances."
No 10504 V.Prigunov (Kazan)
1st hon men Shakhmatnaya kompozitsia

hla7 0104.12 4/4
No 10504 V.Prigunov $1 . \mathrm{Re} 7+\mathrm{Ka8}$
2.Re8 +Kb 7 3.c6+ Kb6 4.Sd5+ Sxd5 5.Rb8+Kxc6 6.Rb1 Se3 7.Rfl Sg4 8.Rdl Se3 9.Rfl Sg4 10.Rd1; positional draw, Kc5 11.RdS+.
"A fresh positional draw based on stalemate. The forcing nature of the play depressed the study in the ranking."
No 10505 L.Topko (Krivoi Rog)
2nd-3rd hon men Shakhmatnaya kompozitsia

e4h3 0403.11 3/4 Win No 10505 L.Topko 1.Rh7+/i Sh4 2.Rxh4+/ii Kh4 3.f7 Rg4+ 4.Kxe5 Rg5+ 5.Ke4 Rg4+ 6.Ke3 Rg3+ 7. $\mathrm{Ke} 2 / \mathrm{iii} \mathrm{Rg} 2+8 . \mathrm{Kf1}$, and the pawn promotes.
i) 1.Rg7? Rh5 2.f7 Rh4+ 3.Kxe5 Rf4. Or l.f7? Rg4+ 2.Kxe5 Rf4.
ii) 2.f7? Rg4+ 3.Kxe5 Rg5+ 4.Ke4 Rg4+ 5.Ke3 $\mathrm{Rg} 3+$ 6.Ke2 Rg2+ 7.Kfl Rg4 8.Rxh4+ Rxh4 9.f8Q Rf4+ 10.Qxf4 stalemate.
iii) 7.Kf2? Rg5 8.f8Q Rf5+ 9.Qxf5 stalemate - a chameleon echo.
No 10506 Em.Dobrescu (Romania) 2nd-3rd hon men Shakhmatnaya kompozitsia


Draw No 10506 Em.Dobrescu 1.f3+ Bf2 2.Rxf2+ Kbl+ 3.Kb3 Qa6 4.Rb2+ Kal 5.Bd2 Qe6 + 6.Kc2 Qf5 + 7.Kb3 Qb5+ 8.Bb4 Qd5+ 9.Kc2 Qf5+ 10.Kb3 Qe6+ 11.Kc2 Qe2+ 12.Bd2 draw.
The source did not supply any annotations.
"This and the previous study each have a pair of thematic tries that fail in a far from straightforward manner. In the first there are chameleon echo stalemates, in the second echo checkmates."
No 10507 V.Kichigin and A.Selivanov 4th hon men Shakhmatnaya kompozitsia

e7g6 0530.37 6/10
Win No 10507 V.Kichigin and A.Selivanov 1.h5+ Kh6 2.g5+ Kxg5 3.Rg7+ Kh6 4.Kf6 Rh1 5.Rxh1 Bd5 6.Rh4 Bf3 7.Rg6+ hxg6 8.hxg6+ Bh5 9.g4 fxg4 $10 . \mathrm{g} 7 \mathrm{clQ} 11 . \mathrm{g} 8 \mathrm{~S}+\mathrm{Kh} 7$ 12.Se7 Kh6 13.Sf5 +Kh 7 14. Rxh5 + Kg8 15. $\mathrm{Se} 7+\mathrm{Kf8}$ 16.Rh8 mate.
"There is compensation for the untidiness of the initial position in the contentful play with sacrifices by both sides and an underpromotion."

No 10508 P.Arestov (Moscow region)
5th hon men Shakhmatnaya kompozitsia


Draw No 10508 P.Arestov 1.Rb7+/i Kh6 2.Rh8+ Kg5 3.Rg7+ Kf4 4.Rf8+/ii Ke4/iii 5.Rxgl/iv Se3+ 6.Ke2 Sxgl+ 7.Kf2 Sxh3+ 8.Kg3 Rxh5 9.Rh8 Sf5 $+/ \mathrm{v}$ 10.Kg4 Rg5+ 11.Kxh3 Kf3 12.Rh7 Rg8 13.Rh5 Se3 14.Rf5+/vi Sxf5 stalemate.
i) $1 . \mathrm{Rh} 8+? \mathrm{Kg} 72 . \mathrm{hRg} 8+\mathrm{Kh} 63 . \mathrm{Rh} 8+\mathrm{Kg} 5$ 4.hRg8+ Kh5/vii 5.Rh8+ Kg5 6.hRg8+ Kf4 7.bRf8+ Ke4 8.Rxg1 Se3+ 9.Ke2 Sxgl+ 10.Kf2 Sxh3+ 11.Kg3 Rh7 12.Rh8 Sf5+ 13.Kg4 Sf2+, and Black wins.
ii) $4 . \mathrm{Rxg} 1 ? \mathrm{Se} 3+5 . \mathrm{Ke} 2 \mathrm{Sxg} 1+6 . \mathrm{Kf} 2 \mathrm{Sxh} 3+$ wins.
iii) Ke3 5.Rxg1 Rd4+6.Kcl Sxgl 7.Rxfl draw.
iv) $5 . \mathrm{Re} 8+$ ? $\mathrm{Kd} 36 . \mathrm{Rd} 8+\mathrm{Qd} 4$ wins.
v) $\mathrm{Sfl}+10 . \mathrm{Kg} 4 \mathrm{Rxh} 8$ stalemate.
vi) 14.Rh6? Sg2 15.Rh7 Sf4+ 16. Kh4 Rg4 mate. vii) The idea behind the white try is fulfilled if 4...Kf4 5.bRf8+ Ke4 6.Rxgl Se3 + 7.Ke2 Sxgl+ 8.Kf2 Sxh3+ 9.Kg3 Rxh5 10.Rh8 Sf5+ 11.Kg4 Rg5 + 12.Kxh3 Kf3 13.Rh7 Rg8 14.Rh5 Se3 15.Rf5+ Sxf5 stalemate.
"The careful choice of first move sets up a stalemate struggle in which the doomed and seemingly insignificant wPh5 plays a decisive role. If only bQ were not so moribund."
No 10509 A.Golubev (Yaroslavl region)
commendation Shakhmatnaya kompozitsia

h3h5 3002.31 6/3

No 10509 A.Golubev 1.Se6 Oxd7 2.g4+ Kh6 3.Sf5 + gxf5 4.g5 Kh5 5.Sf4 mate.
"Short, but entertaining, this duel of the white knight pair with the black queen."


No 10510 N.Rezvov 1.Rgl+ dlQ $+2 . \mathrm{Ka} 3$ Qxe 7 $3 . \mathrm{Bg} 7+\mathrm{Kbl} 4 . \mathrm{Bf5}+\mathrm{Kcl} \mathrm{5.Bh} 6+\mathrm{Qe} 3+6 . \mathrm{Sb} 3$ mate.
"A jolly affair this, macho stuff with four pure mates, checks and cross-checks."

No 10511 A.Kuryatnikov and E.Markov commendation Shakhmatnaya kompozitsia

a7d6 4000.32 5/4
Win
No 10511 A.Kuryatnikov and E.Markov 1.Qh6 Qxh6 2.d8Q+ Kc5 3.Qas+ Kc4 4.Qb4+ Kd5 5.Qb5+ Ke4 6.Qxd3+ Kf4 7.Qd2+ wins.
"The home-coming of the new-born white queen to the square on which her colleague was sacrificed is decidedly amusing."

No 10512 Gh.Kasparyan (Erevan)
commendation Shakhmatnaya kompozitsia

h3f8 3141.44 8/7
Draw
No 10512 Gh.Kasparyan 1.Ba3+ Kg7 2.Rxg5+ Qxg5 3.Bf8+ Kh8 4.f4 Qg6 5.d6, a positional draw, for example: Bg8 6.Kg2 Qf7 7.Bh6 Bh7 8.Kh2 Bg6 9.Kg2 Bh5 10.Kf2 Qg6 11.Bf8 Be2 12.Kg2.
"A curious cage for the overweening black force. The creative activity of the acknowledged master of the study calls forth our admiration!"

No 10513 S.Zakharov and L.Katsneison (St Petersburg)
special prize Shakhmatnaya kompozitsia

e5f3 $0041.013 / 3$
No 10513 S.Zakharov and L.Katsnelson I.Kf5 d3 2.Bxal d2 3.Bh8 diQ 4.Se5+ Kg3 5.Kg6 Qh1 6.Kg7 Qa8 7.Kh7 Qe4+ 8.Kg8 Qd5+ 9.Kh7 Qe6 $10 . \mathrm{Bg} 7$ draw.
"A position of classic clarity winding up with the Karstedt fortress. There are thematic tries and unexpectedly fine geometry in the play by both sides. Quite a success for the composers!"

No 10514 P.Arestov (Krasnoyarsk), V.Kirillov (Serov) and N.Ryabinin (Tambov region) special hon men Shakhmatnaya kompozitsia

h7g5 0361.20 4/4
Draw No 10514 P.Arestov, V.Kirillov and N.Ryabinin 1.e7 $\mathrm{Be} 4+$ 2.Kh8 Kf6 3.e8S $+\mathrm{Kf7} 4 . \mathrm{Sd} 6+\mathrm{Kg} 6$ $5 . \mathrm{Se} 6 / \mathrm{Bg} 7+6 . \mathrm{Kg} 8 \mathrm{Bd5} 7 . \mathrm{c} 8 \mathrm{Q} \mathrm{Rb} 8$ 8.Se8 Rxc8 stalemate.
"The composers have added interesting tries to the IV prize in Schakend Nederland 1987. Experienced Russian solvers fell victims to the tries in the national solving championship!" To which David Blundell comments:
i) "I can't find Black's win after 5.c8Q. If in reply Rb8;, then both $6 . \mathrm{Se} 6 \mathrm{Rxc} 8+7 . \mathrm{Sxc8} \mathrm{Kf7}$ 8.Sd6+, and 6.Qe8+ Rxe8 7.Sxe8 Bf4 8.Se6 Be5+ $9 . S 8 g 7 \mathrm{Bd5} 10 . \mathrm{Kg} 8$ ! seem OK for White. Or if, again in reply, $\mathrm{Bg} 7+6 . \mathrm{Kg} 8 \mathrm{Rb} 8$ 7. Se 6 draws, for example, Bf5 8.Sf8+, or Rxc8 8.Sxc8 Bd5? 9.Se7+."

No 10515 V.Kondratev (lvanovsk region) special hon men Shakhmatnaya kompozitsia

fld3 $0130.113 / 3$
No 10515 V.Kondratev 1.Rg3+ Kc4 2.Rxa3 Kb4 3.Ra2 Ka5 4.Kel Bf7 5.Ra3 Be8 6.Kd2 Bxa4 7.Kc3 Kb5 8.Ral wins.
"In the judge's view the best expression of a reciprocal zugzwang which had not escaped the attention of Vancura, Mandler, L.Kubbel and J.Fritz - what company!"

No 10516 A.Selivanov (Krasnoturinsk) special commendation Shakhmatnaya kompozitsia Position No. 4 from article with the title that translates roughly as "Bish against pawn is no reason to scorn") in Shakhmatnaya kompozitsia No. 7 (1993)

c2f5 0010.01 2/2
Draw No 10516 A.Selivanov 1.Kc3+? Ke5! Or 1.Kd2+? Kf4 2.Ba2 Ke5. So, 1.Kd3 only! And a little echo to follow: Ke5 2.Ke3, or Kf4 2.Kd4.
"The sparkle is in the first move of this 4 -man tit-bit."

Shakhmatnoe obozrenie, 1991
This informal tourney was judged by Vladimir Vinichenko, Novosibirsk. Provisional award published in Shakhmatnoe obozrenie, 3-4/1994. Confirmation period not mentioned. 37 studies published.
Reconstructing and researching this chaotic tourney and award, which straddled the chaotic period of the collapse of the USSR, has been a test of perseverance. Here is the abbreviated story. Two entries (Bronstein; Grin/Gusev) came from articles, another (Khortov/Ryabinin) from 1990 correspondence (which may explain why the 1990 tourney judge overlooked it), and three from the attractive ' 5 minutes to solve from the diagram' sections. Anart from three relevant prize-winners (in the aunrd issue 3-4/1994), solutions to all studies aftc No. 24 ( p 31 of 22/1991) never appeared in $\mid$ int. This applies to 52443668 (ie, the actual serial diagram numbers in "64"). However, composers entered some for the 1989-91 FIDE Album selection tourney, for which EG's editor just happened to be the section director (studies), and one came from contact with the composer. This left your editor to 'solve' the Pankratov. We hope readers appreciate the work done on their behalf, and that the result justifies the sweat and patience!

No 10517 A.Maksimovskikh an 1 V.Shupletsov (Kurgan region)
1st prize Shakhmatnoe obozrenie, 1991

 2.Bxe5+. So he checks, gaining a tempo to block the diagonal :11..Rg8+ 2.Kb7 Rg7+ 3.Ka6 dxe2 4.Sf6, with:
Rf7 5.Bxe5 elQ/i 6.Rh2+ Kg7 7.Rg2+ Kf8 8.Rg8+ Ke7 9.Re8 mate, or

Rg6/ii 5.Bxe5 elQ 6.Rd8+ (Rh2+? Rh6;) Kg7 7.Rd7+ Kh6 (Kf8;Bd6+) 8.Rh7+ Kg5 9.Rh5 mate. i) Had White chosen I.Kxa7? the Black could play here 5...Ra7+.
ii) Rg1 5.Rd7. Or Rc7 5.Rxe2 exf4 6.Rh2+, winning $b R$.
"Interesting dynamic play of both white and black pieces leading to a pair of mid-board model mates. One regrets the unnatural position and that Black moves first."

c4b2 $4010.013 / 3$
No 10518 V.Kozirev and Yu.Seryozhkin 1.Bc3+ Kbl 2.Qg6+ Kcl 3.Kb3 Qh2 4.Qg5+ Kdl 5.Qg4+ $\mathrm{Kcl} 6 . \mathrm{Qg} 6 / \mathrm{i} \mathrm{d} 5$ (d6;Qe4) 7.Be5/ii $\mathrm{Qh} 3+8 . \mathrm{Bg} 3$ Kd2/iii 9.Qc2+Ke3 10.Qf2+Ke4 11.Qf4+Kd3
12. Qf3 + , and on any move by bK the ambush set up during play operates.
i) Setting up an unexpected zugzwang that forces Black to move his pawn." ii) 7.Qd3? Qf2 ... Kal 10.Qxh2 stalemate. Or 7.Qg5+? Kd1 8.Qxd5+ Ke2 9.Qd2+ Kf1 10.Qxh2 stalemate.
iii) $\mathrm{Qc} 89 . \mathrm{Bf} 4+\mathrm{Kd1} 10 . \mathrm{Qg} 1+\mathrm{Ke} 211 . \mathrm{Qg} 2+\mathrm{Kel}$ (Kd3;Qf3+) 12.Bg3+ Kd1 13.Qfl+.
"A miniature in which both white and black pieces unconstrainedly take their places for the finale."

No 10519 V.Vlasenko (Ukraine) 3rd prize Shakhmatnoe obozrenie, 1991

h4a8 $0061.103 / 3$
Draw No 10519 V.Vlasenko Advancing the f-pawn is suicidal, so how does White save himself? 1.Sg4 Bf4 2.Kh3 Bb7 3.Sh2 Bh1/i 4.Sfl Kb8 5.Sg3 Bb7 6.Kh2 Kc7 7.Kg1 Bd6 8.Sf1 Bc5 9.Sh2 Kd6 10.Kf1 Ke5 11.f3/ii Kf4 12.Kg2 Bb6 13.Kh3 Bc6 $14 . \mathrm{Kg} 2$, and now White's idea is clear. It's a positional draw. Far from easy to solve.
i) "It is important to try to prevent the move (2-f3, hard as that is for the solver to grasp."
ii) Now for the crunch analysis: $11 . \mathrm{Kgl}$ ? Kf4 12. $\mathrm{Kfl} \mathrm{Bb} 6{ }^{13 . \mathrm{Kgl} \mathrm{Kg} 5} 14 . \mathrm{Kfl} \mathrm{Kh} 415 . \mathrm{Kgl} \mathrm{Bc} 7$ 16.Sf1 Bc8 17.Sd2 Bh3 18.f3 Kg3 19.Se4 Kf4 20.Kh2 Bc8 21.Kg2 Bb7 22.Kf2 Bb6 23.Ke2 Be3, when Black wins.

No 10520 Yu.Bazlov 1.Bg2+ Se4 (Kc4;Se5+) 2.Kc7 Kc4/i 3.Se5+ Kd5 4.Sg4 Ba8 5.Sf6+ Ke5 6.Sd7+ Ke6 7.Sb6 Bd5 8.Bh3 + Ke5 9.Sd7 mate. i) $\mathrm{Ba} 82 . \mathrm{Sb6}+$. Or Bc 6 3.Sf6+ Ke5 4.Sg4+ Kd5 5.Sf2 wins.
"At the technical level the study is of a high enough standard, but the black counterplay looks very modest: if 2 ...Kc4 $3 . \operatorname{Se} 5+$ is sadistic."

No 10520 Yu.Bazlov (Vladivostok)
4th prize Shakhmatnoe obozrenie, 1991

d8d5 $0044.104 / 3$

No 10521 A.Grin and B.Gusev (Moscow) special prize Shakhmatnoe obozrenie, 1991 after S.Chimedtseren (Ulan-Baatar)

h5h2 $4410.236 / 6$
Win
No 10521 A.Grin and B.Gusev 1.Ra2+ ( $\mathrm{Qc} 2+$ ? Rg2;) Khl/i 2.Qbl+ Rg1 3.Qe4+ dxe4 4.Bxe4+ Rg2 5.Rxg2 Qxd4/ii 6.Ba8/iii Qdl+ 7.Kxh6 (Kxh4? Qd8+;) Qcl+ 8.Kh7 Qbl+ 9.Kh8 Qal 10.Ra2+ wins. No fewer than four pieces play to corner squares in the course of the solution. This improves on S.Chimedtseren's three - see No. 685 in the 1974-76 FIDE Album.
i) Rg2 2.Rxg2+ Kxg2 3.Qg6+ wins.
ii) $\mathrm{Qe} 8+6 . \mathrm{Kxh} 4 \mathrm{Qe} 7+7 . \mathrm{Kh} 3$ wins.
iii) 6.Bb7? Qdl+ 7.Kxh6 Qcl+ 8.Kh7 Qb1+.

The lst honourable mention was awarded to IGM David Bronstein for his xil991 study [d7g4 0010.23] which has already appeared in EG in connection with the HASTINGS-100 award. It was composed when the IGM was taken seriously ill in the autumn of 1990 and had to spend time in hospital. Chess came to his rescue in the long recovery hours.

No 10522 A.Pankratov (Moscow) 2nd hon men Shakhmatnoe obozrenie, 1991

g3fl 0010.12 3/3
Draw
No 10522 A.Pankratov AJR has failed to trace a published solution, and risks his reputation by hazarding: 1.c4 $\mathrm{Ke2} 2 . \mathrm{Bc} 5 \mathrm{a} 2$ 3.Bd4 Kd 3 4.Bal Kxc4 5.Kf4 Kd3 6.Ke5 b5 7.Kd5 b4 8.Kc5 b3 9.Kb4 Kc2 10.Ka3 drawing.

No 10523 V.Kovalenko (Primorsky krai)
3rd hon men Shakhmatnoe obozrenie, 1991


Draw
No 10523 V.Kovalenko 1.f6/i Rg5/ii 2.d7 Kc7 3.d8Q+/iii Kxd8 4.e7+ Kd7 5.e8Q+ Kze8 6.f7+ Ke7 7.f8Q+ Kxf8 8.g7+ Ke7 (Kf7;Rg8+) 9.g8Q hRg4 10.Qh7+ Rg7 11.Qh4+ Rxh4 stalemate.
i) 1.e7? Re4 2.h4 Rxh4 3.f6 Rg4 4.h3 Rel+ 5. Kh2 Re2+ 6.Kh1 Rf4 wins. Or $1 . \mathrm{d} 7+7 \mathrm{Kd8}$ 2.f6 Rf4 wins.
ii) Re4 2.f7. Ot Rf4 2.e7.
iii) 3.e7? Rd4 4.d8Q+ Rxd8 5.exd8Q+ Kxd8 $6 . g 7$ Ke8 7.h4 Rg7 8.fxg7 Kf7 9.Kg2 a5 wins.

No 10524 V.Prigunov $1 . \mathrm{Sg} 3$ a4/i $2 . \mathrm{Sb6}$ a3 3.Sa4 (Sd7? Kd5;) 4.e4+ Kc4/ii 5.Kb6 h1Q (a2;Sf5) 6.Sxh1 a2 7.Sf2 alQ 8.Sd1 (Sd3? Qgl+;) Qxa4 (Qd1;S22+) 9.Sf2+ Kxc3 10.Sxa4 wins.
i) Ke5 2.Sb6 Kf4 3.Shl Ke3 4.h4 Kxe2 5.h5 Kf3 6.h6 Kg2 7.h7 Kxh1 8.h8Q+ wins.
ii) a2 4.Sc5+ Kd5 5.Sb3 Kc4 6.Kc6 Kxc3 7.Kc5

Kxc2 8.Kc4 Kdl 9.e4 Kel 10.e5 Kf2 11.Shl+ Kg 2 12.e6 Kxh1 13.e7 Kg2 14.e8Q hlQ 15.Qe4+ wins.
No 10524 V.Prigunov (Kazan)
4th hon men Shakhmatnoe obozrenie, 1991


Win

No 10525 Valery Khortov (Cherepovets) and N.Ryabinin special hon men Shakhmatnoe obozrenie, 1991


Draw
No 10525 Valery Khortov and N.Ryabinin 1.h7 Rh8 2.g4+ Kg8 3.Rg8+ Kh6/i 4.Rxh8 Rxa7 5.Re8 Kxh7/ii 6.Re5 Sg3 7.Re3 Sfl 8.Rh3 Ra6+ 9.Kb7 Rh6 10.Rc3 Sg6 11.Rc5 Sg3 12.Rh5 Sxh5 13.g5 draw.
i) Kxh7 4.Rxh8+ Kxh8 5.Kb7 draw.
ii) Rxh 7 6.Re5 Sg3 7.Re3 Sfl 8.Re5 draw.

This study has quite a history of collaboration, criticism and improvement. An early (but not the earliest) version is Khortov's 772 (3rd prize, Peckover JT of EG, 1977) in the 1977-79 FIDE Album.

No 10526 G.Slepyan (Belorussia)
1st commendation Shakhmatnoe obozrenie, 1991

d8f8 3017.20 5/4
No 10526 G.Slepyan Solution received from the composer - it does not seem to be in the magazine. 1.Sd7+ Kg7 2.Bb7 Sa5 3.h6+ (Ba8? Sd6;) Kg8/i 4.Ba8/ii Sd6 5.Sf6+K-6.Bxc6 draw. i) Kxh6 4.Bxc6+ Sxc6+ $5 . \mathrm{Ke} 8 \mathrm{Kg} 7$ 6.c8S Kg8 7.Se7+ draw.
ii) $4 . \mathrm{h} 7+$ ? $\mathrm{Kg} 75 . \mathrm{h} 8 \mathrm{Q}+\mathrm{Kxh8}$ 6.Bxe6 Sxc6+ 7. $\mathrm{Ke} 8 \mathrm{Kg} 88, \mathrm{c} 8 \mathrm{~S} \mathrm{Kg} 7$ wins.

No 10527 E.Kolesnikov (Moscow)
2nd commendation Shakhmatnoe obozrenie, 1991


Draw
No 10527 E.Kolesnikov 1.a7/i Kf7 2.Ral h2 3.Kh3 Ra8 4.Kg2/ii Rxa7 (h1Q;Rxh1) 5.Kh1 Ke6 6. $\mathrm{Rxa2} \mathrm{Rxa} 2$ stalemate.
i) $1 . \mathrm{Kxh} 3$ ? Rg 5 2.a7 Ra 5 .
ii) 4.Kxh2? Rxa $75 . \mathrm{Kg} 3 \mathrm{Ke} 6$.

No 10528 S.Radchenko 1.Rhl+ Kg5/i 2.Rgl+ Kh6 3.Kh8 Bf7 4.Be8 Ra8 5.g8S + Bxg8 6.Rg6 mate.
i) Kg 3 2.Rg1+ Kf2 3.Rxg6 Rxd7 4.Rh6 wins.

No 10528 S.Radchenko (Rostov-on-Don) 3rd commendation Shakhmatnoe obozrenie, 1991


Win

## No 10529 A.Gasparyan (Armenia)

4th commendation Shakhmatnoe obozrenie, 1991

g5c5 0040.32 5/4
Win
No 10529 A.Gasparyan 1.f4/i Kd4 $2 . \mathrm{f5}$ exf5 3.Kf4 Bd2+ 4.Kxf5 Kc3 5.Bbl Kb2 $6 . \mathrm{c} 3$ wins. i) $1 . \mathrm{Kg} 4$ ? Kd4 $2 . \mathrm{Kf4} \mathrm{e} 5+3 . \mathrm{Kf5} \mathrm{Ke} 3$, and bK does for wBa 2 .

## Springaren, 1990

This informal tourney was judged by Jarl H.Ulrichsen (Norway) and signed "lii91".

14 studies by 10 composers entered.
No 10530 H.Steniczka 1.Be4 Sd6+ 2.Ka6 Sxe4 3.h6 Sg5/i 4.c5 g2 5.h7, with:

Sxh7 6.c6 g1Q 7.c7 Qc5 8.Kb7 Qb5+ 9.Ka7(Ka8) Qc6 10.Kb8 Sf6 11.c8Q Sd7+ 12.Ka7 Qxc8 stalemate, or
Sf7 6.c6 glQ 7.h8Q/ii Qfl+ 8.Ka7 Qgl+ (Qf2+;Kb7) 9.Ka6 (Kb7? Qbl+;) Qfl+ 10.Ka7 Qf2+ 11.Kb7, draw.
i) Sf6 4.c5 g2 5.h7 Sh7 transposes to the first branch, while Sd6 4.h7 Sf7 transposes to the second.
ii) 7.c7? Qal+ 8.Kb7 Sd6+ and Bl wins.

No 10530 H.Steniczka (Austria) Prize Springaren, 1990


Draw
No 10531 Juri Randviir (Estonia) Hon.Mention Springaren, 1990

d6b8 4133.24 5/8
Win
No 10531 Juri Randviir 1.Rxf5 (h8Q? Sc8+;) Sxf5 $+2 . \mathrm{Kd7}+\mathrm{Ka8} 3 . \mathrm{Qb8}+\mathrm{Qxb8}$ (Kxb8;c7+) $4 . c 7$ Qf8 5.c8Q+ Qxc8+ 6.Kxc8 Se7+ 7.Kd7(Kd8) Sg6 8. Ke8 c4 9.Kf7 $\mathrm{Sh} 8+10 . \mathrm{Kg} 7(\mathrm{Kg} 8) \mathrm{c} 3$ 11. Kxh 8 c2 $12 . \mathrm{Kg} 7 \mathrm{clQ}$ 13.h8Q(h8R)+ mates.

3.g7 Rc2+/i 4.Kb8/ii Rb2+ 5.Ka8 (Kc8? Ba 7 ;)
$\mathrm{Ra} 2+6 . \mathrm{Kb} 8 \mathrm{Ba} 7+7 . \mathrm{Kb} 7$ draw
i) $\mathrm{Ra} 24 . \mathrm{Kb} 8 \mathrm{Ba} 7+5 . \mathrm{Kb} 7$ wins.
ii) $4 . \mathrm{Kb} 7(\mathrm{Kd} 7)$ ? Rc7+ $6 . \mathrm{Kxc} 7 \mathrm{Se}^{+}+$wins.

Now here are four 'extras' from less usual sources, and a Blundell bonus.
..-. .-.....-. .-. .-. .
No 10533 Alexander Pituk
Nový svet, 1941

cla2 $3140.437 / 6$ Win $\quad$ Witexander Pituk The renowned Czechoslovak composer of problems, who was bom in 1904, attended the 1993 Bratislava celebrations. 1.Bf3 $+\mathrm{g} 4 / \mathrm{i}$ 2.Ra6 +Kb 3 3.BdI + Kxc4 4.Bxg4 Qxh4 5.Ra4+, with the four lines:
Kd5 6.Be6+, or
Kd3 6.Be2+, or
Kb3 6.Bdl mate, or
Kb5 6.Bd7+
i) Qxf3 2.Ra6+ Kb3 3.Ra3+. Or Qxh4 2.Ra6+ Kb 3 3.Bdl+ Kxc4 4.Ra4+ wins.

No 10534 Stevan Dulinac (Bosnia)
Mat, 1983

$$
\mathrm{g} 8 \mathrm{~g} 60104.225 / 4
$$

Win
No 10534 Stevan Dulinac 1.Rg4+ Kh6 2.Sh5 g1Q 3.Sf4 Se2 4.Rxg1 Sxgl 5.Kf7 wins.

No 10535 Stevan Dulinac (Bosnia)
Pc' itika, 1964


No 10535 Stevan Dulinac 1.Rb6 Qd5 2.Ra8+ Qxa8 3.Rb3 Ka6 4.Ra3+ wins.

No 10536 Dragutin Djaja (Yugoslavia) Politika, 1964

b6d8 0340.63 8/6
Win
No 10536 Dragutin Djaja $W$ outmanoeuvres Black's attempts to self-stalemate, but it takes a long time! 1.g6 hxg6 2.c7+ Ke8 3.Bh6 g5 4.g4 $\mathrm{Bb} 7(\mathrm{Ba} 6) 5 . \mathrm{c} 8 \mathrm{Q}+\mathrm{Bxc} 86 . \mathrm{Bg} 7 \mathrm{Kd8} 7 . \mathrm{Bf8} \mathrm{Ke8}$ 8.Bh6 Kd8 9.Bg5 Ke8 10.Bh6 Kd8 $11 . \mathrm{g} 5(\mathrm{Bf} 8 / \mathrm{Bg} 7) \mathrm{Ke} 812 . \mathrm{Bg} 7 \mathrm{Kd8}$ 13.Bf8 Ke8 14.Bh6/i Kd8 $15 . \mathrm{g} 6$ and wins.
i) David Blundell indicates the dual: $14 . \mathrm{Be} 7 \mathrm{Bb} 7$ 15.g6 Be4 16.g7 Bh7 17.Kb7 Bh4+ 18.Kc7! $\mathrm{Rxa} 7+19 . \mathrm{Kb} 6 \mathrm{Rb} 7+20 . \mathrm{Ka} 6 \mathrm{Bh} 7$ 21.Kxb7 wins, and proposes the following study based on this.

No 10537 D.Blundell l.a7 Ra8/i 2.Kb6 $\mathrm{Bb7}$ (Ba6) $3 . \mathrm{g} 6 \mathrm{Be} 4$ 4.g7 Bh7 5. $\mathrm{Kb} 7 \mathrm{Be} 4+6 . \mathrm{Kc} 7 \mathrm{Bh} 7 / \mathrm{ii}$ 7.Kb6 Bg8 8.Kb7 Rxa7+ 9.Kxa7 wins, for example: Bh 7 10.Kb6 ... 16...Bg8 17.Kh6/iii Bh7 18.g8Q+/iv Bxg8 19.Bd8 Kf8 20.Ba5(Bb6/Bc7) $\mathrm{Ke} 821 . \mathrm{Kg} 7$ wins.
i) Or $\mathrm{Rbl} 2 . \mathrm{a8S}$ and wins by the following method: Rcl+ 3.Kd4 Rdl 4.Ke3 Rcl 5.Sc7+ Rxc7 6.dxc7 d5 7.Bd6 Bf5 (Kd7;g6) 8.Kf4 Вe6
9.Ke5 Bc8 10.Kxd5 Bf5 11.Ke5 Bc8 12.Ba3 Bh3 13.Kd6 Bf5 14.Bb4 Bh3 (Bd7/Be6;g6) 15.Kc6 $\mathrm{Bg} 2+16 . \mathrm{Kb} 6$, and $\mathrm{Bh} 317 . \mathrm{Kb} 7$, or Kd7 17.g6 winning.
ii) $\mathrm{Rxa} 7+7 . \mathrm{Kb6} \mathrm{Rb} 7+8 . \mathrm{Ka6} \mathrm{Bh} 79 . \mathrm{Kxb} 7$, winning as in the main line.
iii) wK must reach h6 at the moment when bB is on g8, and consequently a second triangulation en route from a7 is needed. Also, White can get the B out before playing wK to h6.
iv) An inversion dual occurs here: 18.Bd8 Bg8 19.Ba5 Bh7 20.g8Q+.

No 10537 D.Blundell, after D.Djaja first publication


## Szachista, 1993-94

This informal tourney was judged by Andrzej Lewandowski (Torun). The provisional award was published in Szachista 3/1996. "...the overall standard was fairly average, only the studies in the award being compositions of high class. Apart from flaws discovered by readers [of Szachista] Roman Caputa has found another two ... In addition I have ruled out $89 / 1994$ by Vrabec on account of its marked similarity to A.Lewandowski's in Schakend Nederland, 1991. From the remaining studies 1 have chosen seven..."
28 studies by 23 composers from 11 countries published. Language translation assistance: J.Rozankiewicz.

No 10538 A. and S.Manyakhin $1 . d 6$ e3 $2 . \mathrm{d} 7$ e2 3.d8Q elQ 4.Qxb6 Qh4+ 5.Kg7 Qe7+ 6.Kh6/i $\mathrm{Qh} 7+$ 7. $\mathrm{Kg} 5 \mathrm{Qh} 4+8 . \mathrm{Kf4} \mathrm{Qg} 3+9 . \mathrm{Kg} 5 \mathrm{Qxg} 4+$ $10 . \mathrm{Kh} 6 \mathrm{Qh} 4+11 . \mathrm{Kg} 7 \mathrm{Qe} 7+12 . \mathrm{Kg} 8 / \mathrm{ii} \mathrm{Ba} 2+$ 13.Kh8 Qg5 14.c4 Bxc4 15.Qg6 Qxg6 stalemate. i) $6 . \mathrm{Kg} 8$ ? $\mathrm{Ba} 2+7 . \mathrm{Kh} 8 \mathrm{Qg} 58 . \mathrm{Kh} 7 \mathrm{Bg} 8+9 . \mathrm{Kh} 8$ Bc4 10.Kh7 Bd3+ 11.Kh8 Qe5+ 12.Kg8 Qe8+ 13.Kg7 Qe7+ 14.Kh6 Qh7+ 15.Kg5 Qh4+ 16.Kf4 $\mathrm{Qg} 3+17 . \mathrm{Kg} 5 \mathrm{Qxg} 4+$ 18. $\mathrm{Kh} 6 \mathrm{Qh} 4+19 . \mathrm{Kg} 7 \mathrm{Qe} 7+$
20.Kh6 Qh7+ 21.Kg5 Qh4 mate.
ii) "Possible now, wPg4 having been sacrificed." "An utterly natural position fails to presage the stormy play to come. In the wake of the obvious introduction battle commences between $\mathrm{Q}+\mathrm{B}$ and $Q$. With this material it is extremely rare to achieve a truly artistic effect, on account of the menace of side-variations in the analyses. Play on both sides in the study by the Manyakhins is amazingly lucid, the finale being attractive and the economy exemplary. How Bl wins after $6 . \mathrm{Kg} 8$ ? constitutes a real study within a study. Brilliant!"
No 10538 A. and S.Manyakhin (Russia)
1st prize Szachista, 1993-94


Draw
No 10539 L.Mitrofanov and A.Selivanov (Russia) 2nd prize Szachista, 1993-94

c6h4 0033.21 3/4
Draw
No 10539 L.Mitrofanov and A.Selivanov 1.e7 Bc2 2.Kc7/i Sd6 (Ba4;b3) 3.Kxd6 Ba4 4.b4 Kg5/ii $5 . e 8 \mathrm{Q}$ Bxe8 6.Ke7 Kf5 7.b5/iii f6 8.Kxe8 Ke6 9.Kd8 Kd6 10.Kc8 Kc5 11.Kc7 Kxb5 12.Kd6 draw.
i) 2.Kc5? Ba4 3.Kxc4 Kg5 4.b4 Kf6.
ii) f5 $5 . \mathrm{Kc} 5 \mathrm{f} 46 . \mathrm{b} 5$.
iii) Thematic try: 7.Kxe8? Ke6 8.b5 f5 9.Kd8 Kd6 10.Kc8 Kc5 11.Kd7 Kxb5 12.Kd6 f4 wins.
"A most beautiful miniature, jointly composed by the recently deceased, eminent composer. Despite the fact that the study is a synthesis of known motifs, the brilliant construction and stirring play by both sides constitute a composition of unusual power of artistic expression."

No 10540 A.Ibrahimov (Uzbekistan)
3rd prize Szachista, 1993-94

c6d4 0013.33 5/5
Win
No 10540 A.Ibrahimov 1.b4/i Sxg2 2.h5 Sh4 3.h6 g3 4.Bxg5 Sg6 5.Bd8 g2 6.Bxc7 Kc4 7.Bb6 Kxb4/ii 8.h7 Se7+ 9.Kb7 wins.
i) 1.hxg5? Sxg2 2.Kxc 7 Sh 4 3.Bf4 Sf5 draw.
ii) $\mathrm{Se} 7+$ 8.Kb7 Sd5 9.Bc5 Sf6 $10 . \mathrm{Kc6}$ wins. Or

Se5+8.Kc7 Kxb4 9.h7 wins.
"A very interesting and deep study. Nevertheless, a large part of its subtlety is hidden in the wings of numerous side variations - a feature which in my opinion diminishes its artistic impression."

The 1st honourable mention by G.Slepyan can be found on page 5 of this magazine in the interview with this Belarussian composer.

g2c7 3551.01 6/5
Win No 10541 A.Stavrietsky 1.Rbl Qd5+ 2.Kgl Qxc6 3.Ba5+ Kd6 4.Rd1+ Qd5 5.Bb4+ Ke5 6.Re2+

Qe4 7.Bc3+ Kf4 8.Rf1+ Qf3 9.Bd2 mate.
"Systematic manoeuvres of five pieces achieved with little artictic content. The final mate improves to some extent the not very good overall impression."

No 10542 E.Pałłasz (Poland)
1st commendation Szachista, 1993-94


Draw
No 10542 E.Pałlasz [The vi94 correction has the white king on g 8 and pawn a2 moved to c2. Same solution as below.] $1 . \mathrm{Kf8} / \mathrm{i} \mathrm{g} 52 . \mathrm{a} 4 \mathrm{Ke5}$ 3.Ke7 d4 4.Kxd7 Kd5 5.Kc7 Kc5 6.Kb7 Kb4 $7 . \mathrm{Kb} 6 \mathrm{~g} 4$ (Kxa4;Kc5) $8.55 \mathrm{~g} 39 . \mathrm{a6} \mathrm{~g} 210 . \mathrm{a} 7 \mathrm{~g} 1 \mathrm{Q}$ 11.a8Q draw.
i) $1 . \mathrm{Kxf7}$ ? g5 2.a4 Ke5 3.Ke7 d4 4.Kxd7 Kd5
$5 . \mathrm{Kc} 7 \mathrm{Kc} 56 . \mathrm{Kb} 7 \mathrm{~g} 47 . \mathrm{a} 5 \mathrm{~g} 38 . \mathrm{ab} \mathrm{g} 29 . \mathrm{a} 7 \mathrm{~g} 1 \mathrm{Q}$ $10 . a 8 \mathrm{Q} \mathrm{Qg} 7+$, with a winning position due to Lolli (18th century).
"An interesting pawn study with a nicely motivated refusal to capture on f7. Unfortunately, the construction is not too good and the conclusion is identical to the study awarded second prize."


Win

[^0]3.h6 b2 4.h7 blQ 5.h8Q+ Bb8 6.Qh3 wins i) 1.h6? b3 $2 . \mathrm{h} 7 \mathrm{~b} 23 . \mathrm{h} 8 \mathrm{Q}$ bIQ 4.Qh3 Qe4 draw "A lightweight study, but it retains interest. Regrettably the author's solution stops after six moves when further continuations are not clear-cut. As a result it lacks a distinct point."

| ARTICLES |
| :--- |
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| THE CHESS STUDY AS A |
| MULTI-CRITERIA SYSTEM |

## Prof. Emilian Dobrescu

## I. Introductory remarks

1. An essential chapter of the theory of measurement refers to the "separate evaluation of a multi-criteria system by several judges individually".
1.1. The judge may be one person or a group of persons (if together they make one evaluation). But in every case these persons have to be familiar with the given system and with the way it has to be evaluated. The class of candidate subjects has many members, ranging from goods buyers to standard makers, from designers of new products or technologies to professors, experts serving on auction committees, etc.
1.2. Evaluation may be achieved in a varity of ways; with qualifications, scores, or simple classifications. Each judge - whether individual or group - decides independently. This is the meaning of "separate evaluation". Interchange of information regarding the evaluation process is neither implied nor banned.
1.3. The concept of "system" is assumed in its widest meaning.
1.4. A multi-criteria system is considered to be a system characterized by several attributes (properties, parameters,
performance criteria) which judges have to take into account in their evaluations. The attributes express the relationship between subject and object, between the structure of the system and the human evaluative act. There is a range of variation within certain definition limits, outside which the system ceases to be the same.
2. When $\mathbf{c}$ is the set of attributes of a given system, the evaluation of judge $j$, that is $\mathbf{W}_{\mathbf{j}}$, can be expressed by:

$$
\begin{equation*}
\mathbf{W}_{\mathrm{j}}=\mathbf{F}_{\mathrm{j}}(\mathbf{c}) \tag{I. 1}
\end{equation*}
$$

where $F_{j}$ is the aggregational function characteristic for the respective judge. This is the normal equation in the theory of preferences (utility).

Both the aggregational function and the set of attributes taken for evaluation are specific to every judge. But it may be asked, are the evaluations $\mathbf{W}_{j}$ subjective and incidental appreciations?

Such a hypothesis has sometimes been accepted, especially in the arena of simplifying mechanistic sociological doctrines. However, it fails to take into account that the judges - as informed persons - resort for their estimations to information sources (on the system being examined) that have many common, if not identical, $\mathrm{se}_{i}$ ments. As a result, out of the set c we can deduce a subset of attributes $c_{s}$ - termed stable - which are taken into consideration by almost all judges. An analysis of a large variety of measuring methods - utilized in economy, in public life, in science, in education, the arts, sport - has confirmed the fact. In practice, the probability of the "Arrow paradox" [Zeno? AJR] in making collective decisions is considerably reduced by the presence of the subset $c_{s}$. Certainly, the subset $c_{s}$ is conditioned by the environment, varying as a function of time and space (the determinations here are numerous and their study is not the object of this paper).
3. In my opinion, for an attribute to belong to the subset $c_{3}$ it has to satisfy two

## requirements

3.1. First, it must be measurable; thus contradictory views regarding its variation are excluded (Wiener, pag.99-104).
3.2. Second, the direction in which the variation of the respective attribute influences an evaluation process has to be widely accepted. That is, it can be found usually in the appreciations on which the classifications are based as well as in professional commentaries. I cannot say "unanimously accepted", since such a condition would be excessive and impossible to test.
3.3. Requirements 3.1. and 3.2. may be converted into the following rule: those attributes are stable for which it is possible to define unequivocally the sign of the ratio $\left(d W_{j}\right)_{i} / d c_{i}$, where $\left(d W_{j}\right)_{i}$ is the variation of the evaluation induced by the variation of attribute $c_{i}$. The ordering of stable attributes according to their influence on evaluation is not compulsory; if such relations are possible, they have to be widely accepted too (see 3.2.).

## */*

The chess study may be a good illustration of the above considerations. Before directly approaching this problem, we have to find satisfactory answers to two questions: "What is the chess?" and "What is the chess study?".

## II. Chess and its fundamental problem

1. This question has often been raised: is chess a science, a game or an art. Different answers have been given. In his model, Roycroft considers chess as a combination of the three forms of human creativity.
1.1. In his opinion, chess contains problems that can be scientifically analyzed.
"What... might be the data, the inanimate elements, the scientific subject-matter of chess? They are the board which we stall abbreviate to $B$, by which is to be understood the normal arrangement of six-ty-four squares; the normal complement of thirty-two chessmen, abbreviated henceforth as $M$; and the rules, $R$, governing the actions of the $M$ on the $B$. The ensemble of scientific data can now be called BMR, which it will frequently be found convenient to place within brackets, thus: (BMR). As win, loss and draw are effectively defined by the $R$, we may introduce easily a perfectly scientific notion of analytic proof or truth, denoted by $E$, and it is now possible to write (BMR)T with the clear meaning of full and exhaustive chess analysis with a definite result (namely, win or draw). We may also define (BMR), to mean the data for a single position, and by natural extension (BMR) ${ }_{\mathrm{n}}$ means the data for n , or all, positions, and (BMR), T means the analytic <truth> about a specific position" (Roycroft, pag.343-344).
1.2. At the same time, chess includes elements of games. "In other words G elements relate to the actions and interactions of living persons engaged in a game" (Roycroft, pag.345). "Game truth, or (G)T, is quite different from (BMR)T. It can only be a statement of the relative strength of two players at a certain time and in a certain place" (Roycroft, pag.346). "The scientific and the game aspects do in fact mutually interact (inextricability) and this fact is simply represented by juxtaposing the expressions:
$\left[\mathrm{P}(\mathrm{BMR})_{1} \mathrm{~T}\right][\mathrm{P}(\mathbf{G})]$
Thus BMR and G remain distinct, despite the indubitable influence that each has in the player's mind in the course of a game" (Roycroft, pag.346-347).
1.3. It is recognized chess has also the capacity to produce artistic effects. "To me it is clear that the aesthetic effect of chess is closer to that observed in science than to that of music, if only because the capacity of chess for expressing emotion is
so severely restricted, however much emotion the player, composer or solver may feel. Be that as it may, chess does speak to some people and allow them to speak. No one who has won a fleeting understanding of the masterpieces of Capablanca, Rubinstein, Alekhin, Bronstein, Botvinnik, Keres, Tal or Fischer, not to mention Liburkin or Kasparyan, will deny that it is proper to apply the word beauty to certain chess phenomena. Chess at a high level can be artistically creative" (Roycroft, pag.348).
2. It must be mentioned that these components [II.1.1., II.1.2. and II.1.3.] are to be found in three relatively distinct areas of chess activity.
2.1. According to Zermelo's theorem, in a game perfectly played by both sides, the result is determined, i.e. it is always the same.

Yet, what is this result? Does White win? Is the draw inevitable (as Capablanca believed)? Does victory go to Black (in this case, the original position would be mutual zugzwang)?

This is the question! And as long as it is not completely solved, chess will still be interesting from the scientific point of view, if only for the fact that this question includes the permanent and exciting problem of the implications the "initial impulse" can have in the dynamic systems. As an experimental domain for the discussion of this problem, chess has advantages:

- it is complex enough, so the "initial impulse" is hardly detectable in the subsequent evolution of the phenomenon;
- it is nevertheless finite, hence solvable;
- its theory is, to a great extent, worked out.

Justified by the requirements of the practical game, the simultaneous study of the three stages of the game - the opening, the middle-game and the ending (including studies as special positions) - seems to be the most sensible approach to the fundamental problem of chess, since it reduces considerably - according to the "branch and bound" principle - the graph of variations to
be alalysed. Its dimensions are in any case beyond our imagining: despite centuries of investigations, the answer remains remote. The best way forward has to be the one chosen historically. It could be improved if the centres of analysts from different countries would cooperate to pool their resources for a common goal.
2.2. While theory omits elements $\mathbf{G}$ (from Roycroft's model), in the practice of the game they are paramount in popular chess (for entertainment) though somehow less significant in tournament chess (perhps due to the more thorough training of professional players). [Not necessarily. G-elements easily extend to include ambition, the competitive drive, the ratings rat-race, all championships. AJR]
Computer chess has proved to be an excellent method of training for artificial intelligence.
2.3. Aartistic elements - no more than incidentals to theory and in practical play - take precedence in the composition of problems and studies.

## III. What is a study ?

The widest definition of the study is a legal chess position, having a definite stipulation, achieved by one of the parties (the subject) through a unique solution, against perfect play by the opponent.

1. By position we mean the arrangement of several pieces (kings necessarily included) on the chessboard. By legal we mean the position achieved in a game that obeys the rules of chess, without the perfect game clause; such a clause is patently absurd since this is the fundamental problem of chess. The pieces, chessboard and rules are those laid down in FIDE's published Laws of Chess.

The observance of regulations is a sine qua non of study composition. In problem composition it has been abandoned. The heterodox and fairy styles - having different rules, different boards and pieces -
have become widespread in this century. The FIDE Album for 1983-1985 records 6696 problems entered for selection, out of which 2850 were heterodox and fairy (more than 42 percent); out of the 999 that were selected, 472 were heterodox and fairy (more than 47 percent). Compliance with the FIDE Laws helps the study play an important role in assembling and consulting the data required for solving the fundamental problem of chess.
2. The stipulation is the required result - the victory of one of the sides or a draw - after a series of half-moves".

Any ramification of half-moves starting either from an initial position or from intermediate positions - leads to a final position, a definite result requiring [In principle! AJR] no demonstration.

When we examine the evolution of the chess study, we find the following types of end-position:
a) 'stop-positions', whch automatically terminate the game (mate, stalemate, force balance excluding a win, some positional draws);
b) the positions inevitably leading to a stop-position either by one of the techniques known to endgame theory or demonstrated through new types of analysis accompanying the study; by endgame theory is meant the rules and standard positions settled for the practical game, as well as studies, all of them together being considered a common informational thesaurus accessible worldwide.
3. The subject of the stipulation is the party striving for the stated result. Conventionally, the method of "position normalizing" (used in problem composition) has already been accepted in the field of studies.

[^1]That is, the stipulation always refers to White who has the first half-move (unless it is stated that Black is to move). Positions with Black as "subject" may be normalised by inverting the colours.
4. What does "perfect play by the opponent" mean? This refers to play hy Black in normalised positions. The literature shows two interpretations.
4.1. According to what I shall 411 "the strict interpretation", "perfect pi" " delivers the longest survival time or resistance (for Black), hence the longest series of half-moves before a terminal position. Here is an example:
III.1. G.E.Barbier and F.Saavedra Glasgow Weekly Citizen, 1895


Win
The solution to III.1.: 1.c7 Rd6+ 2.Kb5 Rd5 + 3.Kb4 Rd4+ 4.Kb3 Rd3+ 5.Kc2 Rd4 6.c8R Ra4 7.Kb3 wins. No other black move will be found to have a longer route to a termination point or 'stop-position'.
4.2. The second, which I shall call "the lax interpretation", accepts the same norm (the longest time for resistance by Black), but only for the main variation or variations; half-moves leading to longer resistance may occur in minor variations. We again resort to an example:
III.2. H.Rinck

Ceske Slovo, 1924, 2nd prize

b4f8 $0161.003 / 3$
Win
The solution to III.2.: 1.Ra7 Bfl 2.Ra2 Bh 8 3.Ra8 +Kg 7 4.Ral wins. But, there are also the defences: 2...Bf6 3.Rf2 $\mathrm{Be} 7+4 . \mathrm{Kb} 3$ (4.Kc3 Bf6+ 5.Kb3) $4 \ldots \mathrm{Ba6}$ (b5) $5 . \mathrm{Sd} 5+\mathrm{Ke8} 6 . \mathrm{Sc} 7+$ or $2 \ldots \mathrm{Bg} 7$ 3.Rf2 Ba6 4.Se6(h5)+ Kg8 5.Rg1, that increase Black's resistance by $1-2$ moves.

The lax interpretation raises two new questions:

- what is meant by the variations of a study?
- what are the characteristics of the main variation or variations?
4.2.1. In its widest sense, a possible variant is any series of half-moves starting from the initial position or from the intermediate ones up to an ending. The analyses repeating the ending theory do not have this quality. For instance if in Barbier and Saavedra's study, the black moved 1 ...Rd1 followed by $2 . c 8 \mathrm{Q}$, to demonstrate white gain would not be a variant of the study, since the theory of endings has already elucidated this force balance.
4.2.2. Within the set of possible variants, a subset of study variants, including the main variant or variants, tries and secondary variants are to be distinguished.
a) What does it mean the main variant or variants? What is the criterion defining them?

One such variation might be quantitative, meaning: the main variation is the
longest: if two or more variations are equally long they are all considered main variations. It is quite obvious that this criterion is correlated to the strict interpretation of perfect play by Black. Neither composition nor literature have ever chosen the quantitative approach in any of the stages of chess study evolution. The value criterion is to be preferred, according to which the main variation is considered to be the most valuable one, and if two or more variations belong here, all are entitled to be considered main variations. Since the definition of the value of a variation is, to say the least, a matter for debate, it has tacitly been assumed that the author of the study is the best person to define the main variation(s). [We are unhappy with this as it allows any composer to choose as main line the line containing what he set out to show, irrespective of the competing content of the composition. AJR]
b) Tries are the result of white half-moves that differ from those in the main variation(s); consequently, the outcome of a series of unique black half-moves against perfect play (subsequent to the deviation) by White no longer corresponds with the requirement in the stipulation.
c) Secondary variations are the result of black half-movesthat vary from those in the main variation(s), consequently leading to a stipulation which is the outcome of a series of unique white half-moves against perfect play (subsequent to the deviation) by Black.

It is obvious that both tries and secondary variations arise directly from the main varition(s). More detailed ramifications are not considered to be study variations.
5. Unique [white] half-moves are equivalent to the absence of duals. A dual is a half-move (different from the one intended by the author) leading either to the fulfilment of the stipulation in the main and secondary variations or to a demotion of the stipulation into a try; the concept of dual includes its most grave form, too - the double solution. Uniqueness of solution refers to study variations, as defined above in III. 4.2.2.

The practice of study composing tourneys supported by the literature of the field has also made concessions to the strict
concept of uniqueness. Briefly, a so-called 'principle of neutrality' is invoked. If the change from one specific position to another - both positions being inherent to the play can be achieved by a choice of half-moves irrelevant to the solution, then the duals thus obtained are condoned. In these cases the positions to be reached are at least one half-move before termination of the solution. Here are two illustrations of neutral half-moves:
III.3. Em. Lasker

Deutsches Wochenschach, 1892

c8a6 $0400.113 / 3$

The solution to III.3.: 1.Kb8 Rb2+ 2.Ka8 Rc2 3.Rf6 $+\mathrm{Ka} 54 . \mathrm{Kb} 8$ (but also 4.Kb7) 4...Rb2 + 5.Ka7 Rc2 6.Rf5 + Ka4 7.Kb7 (but also 7.Kb6, with the threat $\mathrm{R}: \mathrm{f} 2$ ) 7...Rb2 + 8.Ka6 Rc2 9.Rf4 + Ka3 10.Kb6 $\mathrm{Rb} 2+$ 11.Ka5 Rc2 12.Rf3 +Ka 2 13.R:f2 wins.
III.4. A.Mouterde

La Stratégie, 1922


The solution to III.4.: 1.Rd3+ Kc8 $2 . \mathrm{Rc} 3+\mathrm{Kb} 83 . \mathrm{Qc} 7+\mathrm{Ka}$. The white queen must reach b2, otherwise the stipulation will not be fulfilled. The shortest way is 4 -7.Qa5-b4-a3-b2 + followed by 8.Ra3 + , but the same result can be achieved in other ways $4-8 . \mathrm{Qc} 6-\mathrm{a} 4-\mathrm{b} 3-\mathrm{a} 2(3)-\mathrm{b} 2+$ or $4-9$. Qa5-b5-a4-b3-a3(2)-b2+ etc.

Up to the present time in the field of studies the principle of neutrality is the only one accepted as regards the admissibility of duals. The future will undoubtedly adjust to a broader conception.

If black play is stronger than the one intended by the author and makes the stipulation impossible, then the study is disqualified as unsound.

## IV. Controversies in study evaluation

Two tendencies are to be noticed.

1. The first insists on the general criteria according to which one study may be considered more valuable than another. Here are the opinions of some outstanding experts.

According to Troytzky "a study is the more precious, the more complex and lavish its idea. The most attractive aspect of chess is conflict. That is why it is to be given priority; the party to be defeated should have numerous means of defence during the solution. The black pieces should not be forced too hard - the contest should offer several variations, while at the same time the play should not be too short. Themes acquire greater relevance when the introductory play is closely related to the subsequent play. If the number of pieces taking part in this preparatory stage is larger, then the number of resulting variations should be larger also. Economy of means and forces is a principle that has to be obeyed for the artistic realisation of the idea in all its stages. Pieces that do not participate in the solution in one way or another should not be on the chessboard at all" (Kazantzev, p. 109-110). Herbstman considers that "all three stages of play in a study - introduction, main line, finale - should be organically linked, and should arise one from the other.

It is advisable for the first move not to be obvious, to be difficult to find... It is better for an introduction to be without captures, sacrifices or piece exchange, that is, with the material available in the main play." (Herbstman, p. 154-155).

In Platov's opinion "The study, like any work of art, should satisfy requirements of both content and form. The content is any idea used in a combination or in a positional game; excellence of form consists in simplicity of structure alongside an economical use of means: the simpler the standing position, the stronger the impact of the concealed idea" (Kasantzev, p. 127)

Referring to problems, but also to moments in studies, Sam Loyd said: "My theory regarding the first move of the solution is: it should be completely different from the one a chess player might seek in 999 out of 1000 situations" (Ianovcic, p. 59).

According to Réti" Chess sturlies are endings with an unusual content" (Ianovcic, p.211).
L. Kubbel said that " The idea should be carried out as a fierce fight between the two parties, every piece taking active part. Black should not wait passively for White to carry out his plans, he should oppose him, create counter-threats, combine defence and counter-attack. All the stages of this battle - introduction, main stage, ending - have to be closely related. Each idea should be expressed with the fewest possible means, strictly obeying the principle of economy. The initialposition of the study should be natural" (Kazantsev, p.138).

In Farago's opinion, "the definition of a good study is... the following: the achievement of a genuine, aesthetic and profound idea, in an economical initial position, with a solution offering many points and surprises" (Farago, p. 39).

Korolkov thinks that "the study expresses the chess struggle in artistic form... However, the study can show only one stage of the complex fight in a match. A study usually illustrates a certain clever scheme, a striking combination, or another more or less significant idea" (Korolkov, p. $61)$.

According to Simkhovich "in making
up a study, two moments play the decisive part: the termination - mate, stalemate, perpetual check etc. - and the previous play of the white and black pieces... The profundity of the theme is enhanced if the preparatory moves are closely linked to the subsequent play" (Korolkov, p. 64).

Gurvich states that "Chess offers no end position as aesthetic asset per se, no matter how original it may be. Any finale, any interaction of the pieces, can be considered an event only in the context of the preceding fight. In a perfect study it is not possible to distinguish the introduction, the subsequent play, and the finale. Form and content are not to be sundered, isolated, nor even distinguished" (Gurvich, p. 140).

According to Neidze" the moves of the pieces in studies based on geometrical movement evoke the distinct lines and beautiful ornaments characteristic of architecture and artistic creation. The same holds good for those introductory moves which......lead the solver to a striking finale - mate, stalemate, - or to an original environment for a draw" (Nadareishvili, 1975, p. 10).
2. As a reaction to the more general approaches, often criticised as fuzzy, an alternative movement has emerged, namely to construct numerical evaluation systems for studies. In the early seventies a method of scoring using a 15 -point scale was proposed; at present, Romania's national championship make use of such a method.

The five [currently four, in half-point gradations AJR] point system used in selecting the studies for FIDE Albums since 1980 may be noted, and it is worth mentioning that the granting of international FIDE titles for composing is based on the number of a candidate's compositions included in the Albums.

This tendency has met with disapproval from many outstanding personalities of the modern study, notably Kasparyan. He says: "Attempts have been made lately to judge tourneys by the so called system of absolute evaluation on the point scale. The essence of this system resides in the fact that
each work taken separately - no mutual comparison - gets certain numerical specifications... The concepts 'beauty, originality, theme, style, genre', simply cannot be evaluated by numerical indicators and coefficients" (Kasparyan, 1988, p. 240-241). However, when presenting his own view, Kasparyan cannot avoid generalizations. "The following criteria of study evaluation are known today:

- simplicity and naturalness of form
- an interesting, striking and beautiful content
- an organic link between introduction and main play
- a well concealed finale
- an unforced solution is to be preferred
- interesting counterplay by Black
- a good utilization of the material with dynamic play
- the solution should be neither too long nor too difficult.

Aware of the rightfulness of these requirements, we have to add, all the same, that the art of composing studies does not accept finite standards and recipes... The composer has to strive for attaining these goals, but creatively and not mechanically" (Kasparyan, 1988, p. 238).
3. I do not believe this diversity of opinions to be an accident. It illustrates the difficulties confronting the measurement task. As in many other fields, to approach chess studies as a multi-criteria system seems to be the most promising procedure.

## V. The attributes of chess studies

The following systematization is the outcome of my own experience as a composer, as well as of the conclusions reached after examining all the monographs on chess study published in the 20 th century. Attributes are divided into static (related to the structure of the standing position) and dynamic (related to the play).

1. The first (static) group includes:
1.1 the material dimension ( $c_{1}$ ) of the study
1.2. the arrangement of the pieces $\left(c_{2}\right)$ on the board
1.3. the initial force balance $\left(c_{3}\right)$ between white and black
1.4. the degree of tension $\left(c_{4}\right)$ in the position.
2. The dynamic attributes result from the characteristics of half-moves, the structure of the play and the participation of the pieces in the development of the solution.
2.1. Complexity ( $\mathrm{c}_{5}$ ) - means all the lines of play which have to be examined in order to identify the study variations that prove the absence of either 'no solution' or duals. The author or solver may not notice such shortcomings, but the correctness (hence the validity) of the study in question, will be no more than acceptable, rather than definitive, in the absence of exhaustive analysis. The unique half-moves in the main variation(s), tries or secondary variations make up what we call the consistency ( $\mathrm{c}_{6}$ ) of the study. Complexity is something wider, including the neutral half-moves in the variations and all half-moves (with $r$ without duals) in the other possible variants $\left(c_{50}\right)$. Therefore, $c_{5}=c_{6}+c_{50}$.
2.2. Half-moves associated with consistency are of several kinds. The list prsented here was influenced by tendencies in the literature as well as by discussions with many chess experts, analysts, all categories of players - from amateurs to masters - judges, and endgame or problem composers.
2.2.1. I shall call umconventional ( $c_{61}$ ) those half-moves which contradict the "common sense" of the practical game in having a low degree of expectancy. I refer to half-moves that are "detrimental" in the following ways:
a) from the material point of view sacrifices, underpromotions, refusal to capture pieces;
b) from the positional point of view -
removal of the own active pieces from the theatre of operations; "self-incarcerations" and other methods of reducing the playing space of the player's own pieces; weakening of the configuration of the player's own pawns (isolating, doubling or tripling them); the facilitation of positionaly good half-moves for the opponent.
2.2.2. Another category includes half-moves having several functions, called here multivalent ( $\mathrm{c}_{62}$ ), like those combining defence and attack or generating more threats (by one or more of the player's pieces against one or more of the opponent's pieces) or including various kinds of interactions (interferences, pins and half-pins, batteries, obstructions, line-clearances etc.).
2.2.3. Strategic half-moves ( $c_{63}$ ) are different in that they reveal their meaning only when linked with other half-moves, together with which they form special positions (zugzwangs, dominations, stalemates, mates, positional draws, special configurations - geometrical ones included), or achieve certain manoeuvres (systematic movements, envelopments, "roman" deviations, imitations etc.) or repeat certain directions, positions, interactions between pieces etc., (echoes and cycles belong here).
2.2.4. In modern studies, so-called difficult half-moves ( $c_{64}$ ) play an important part. However, there are as yet no widely accepted criteria to delimit them. It seems natural to accept that the larger the number of possibilities to select from the more difficult a half-move is to identify, with wider analysis required to reject false continuations.

These criteria could be the basis for a specific scale of "difficult". [There is no consensus among psychologists on a definition of "difficulty". AJR]
2.2.5. The above-mentioned kinds of half-moves - unconventional, multivalent, strategic and difficult - are not incompatible with each other. A half-move may qualify for all four categories. However, there are
also what I call normal ( $\mathrm{c}_{55}$ ) half-moves which - although unique and belonging to the study variations (main, secondary and tries) exhibit no special quality, and merely comply with the normal mental features of the practical game: they do not fit any of the categories $c_{61}, c_{62}, c_{63}$ and $c_{64}$. The same is true of neutral half-moves, the difference being that they are not unique.
2.3. The coherence ( $c_{1}$ ) of a study reflects the strong relationship between its main stages (conventionally the introduction, the main play and the finale). Inner unity, or harmony, is manifest in certain elements present in the three stages - piece arrangements, interactions, half-moves etc. - that associate in the examiner's mind as either similar $c_{i}$ contrasting features.
2.4. Another attribute of the study is the dynamism of the pieces ( $c_{8}$ ).
3. The taxonomy here suggested - 12 attributes (four static and eight dynamic) can surely be improved. Future research will probably develop it, both extensively - adding new attributes (difficult to perceive today) and intensively - by splitting some of those listed above.

The examination of classifications from many international competitions a id FIDE albums, using modern statistical methods, as well as the literature of the field and judges' reports, all lead to the conclusion that the chess study, too, has stable attributes, meeting demands 1.3.1. and 1.3.2. According to these requirements, I propose to analyze the attributes mentioned under V. 1 and V.2.
3.1. The material dimension $\left(c_{1}\right)$ is determined by the number of pieces in the starting position. For the same content, it inversely influences the value of the study, by invocation of the principle of economy, generally accepted today. This attribute is stable.
3.2. As regards the dispersion of pieces $\left(c_{2}\right)$, an indicator might be the sum of
distinct directions calculated by the geometrical rules of the 'maximummer' problem genre. By distinct direction I mean the shortest vacant path (one way) between two pieces; for pieces not on the same horizontal, vertical or diagonal line, the king's move is used as unit of measurement. For instance, three pieces found on al, el and hl form between them directions al-el and e1-h1, never al-h1. Or, if the positions of the squares occupied are a1, b1, b2 and c2, there is no distinct line between al and c2, since the two minimal possible ways (a1-b1-c2 or al-b2-c2) are blocked. If the starting position consists of $n$ pieces and among them $\mathbf{N}$ distinct directions are formed, of the length $\mathbf{d k}$, then:

$$
c_{2}=\Sigma \mathrm{d}_{\mathrm{k}} / \mathrm{n} \quad \mathrm{k}=1,2 \ldots \mathrm{~N} \quad \mathrm{IV} .1 .
$$

For Barbier and Saavedra's study II.1., $c_{2}=5.325$, and for Rinck's study III.2., it has the value 12.6.

The opinion is widely held that a direct relationship exists between $\mathrm{c}_{2}$ and W , but it must not be generalized. An initially compact position (low $c_{c}$ ), "expanding" during the solution can be interesting too. We should exercise caution and accept the fact that $c_{2}$ cannot be incorporated into the category of stable attributes.
3.3. The initial force balance ( $\mathbf{c}_{3}$ ) between White and Black is not expressed by the number of pieces. Relative force of pieces has to be calculated. Computational programs commonly resort to variable evaluations according to the actual structures of the positions to be evaluated. The mobility and efficiency of the pieces' actions depend on these structures, and this is essential for the game. For a study, such an approach is meaningless, because the material dimension is modified by its relationship to analytic and artistic considerations. As in economics, for instance, we have to resort to constant evaluations. The evaluations accepted for the starting position of the game (Stefaniu, p.173, calculated with reference to the pawn) may be used:

$$
\text { - pawn } 1
$$

- bishop 3
- knight 3
- rook 5
- queen 9.

Since the kings are obligatorily present as a study constant, their evaluation controversial, due to their special role - may be omitted.

The force balance is the ratio between the total value of white pieces and the total value of black pieces in the starting position. Returning to the above-mentioned examples, in Barbier and Saavedra's study III.1., $c_{3}=0.2$, and in Rinck's study III.2., $\mathrm{c}_{3}=1.33$.

The relationship between this attribute and the value of the study is less certain. Thus it seems that for normalized studies the weaker White is compared to Black, the more exciting the stipulated task; and this is an advantage. But a position in which White is materially marginally superior, while Black has threats, visible or hidden, seems attractive too. Since the solution is unique (as defined in chapter III) studies in which the force balance favours White attract the interest of solvers and judges alike.

Since the sign of the ratio $\mathrm{dW}_{3} / \mathrm{dc}_{3}$ can not be determined on the basis of some generally accepted evaluation, the force balance, even if measurable, is not a stable attribute.
3.4. The degree of tension $\left(\boldsymbol{c}_{4}\right)$ in the starting position may be expressed by the number of attacked pieces ( $\mathbf{m}$ ) as compared to the total number in the diagram, i.e. $\mathbf{c}_{4}=$ $\mathbf{m} / \mathbf{c}_{1}$. A piece is deemed under attack if it is liable to be captured and not defended, $\mathrm{o} s$ defended but threatened by a weaker piece. As far as the king is concerned, not only checks (already accepted in study composition) but also direct threats of mate (in one or two half - moves) should be identified.

It follows that even if certain evaluative conventions are used the degree of tension in the starting position can be measured. The relationship between this attribute and the value of the study is not univocal as it depends on the first half-moves
of the main variation. If a threatened piece merely withdraws from being attacked, or is simply defended, then the initial tension is marked "minus". If, on the contrary, such half-moves lead to tries and the main variation leaves the attacked pieces "en prise", then the initial tension represents a "plus" for the study. Since it is not yet possible now to delineate the boundary between the two cases using strict criteria, attribute $\mathrm{c}_{4}$ should not be included in the stable category.
3.5. In principle, it is possible to measure the component $c_{50}$ of complexity by the number of half-moves it contains. This indicator ranges between a lower limit (in which duals of minimum length to the finale are taken into account) and an upper limit (when all the duals are taken into account). Besides this ambiguity, there is another, namely the correlation between $c_{50}$ and the value of the study. Some composers and judges are uncomfortable with type $\mathrm{c}_{50}$ complexity; others prefer it, independent of the scale; there are other experts who accept it up to a certain 'dimension'. Since the evaluation of $c_{s_{0}}$ complexity and its relationship to a study's value is not highly relevant, this attribute too lacks stability.
3.6. Each of the attributes $c_{61}-c_{65}$ is measurable by the corresponding number of half-moves. A conspicuous attribute will exercise positive influence on the value of the study. Hence, attributes $c_{61}-c_{65}$ are stable.

But, the consistency ( $c_{6}$ ) does not mean only the sum of attributes $c_{61}-c_{65}$, because the types of the constituent half-moves are not of equal value. The weighted sum $\Sigma \alpha_{i} c_{6 j}$ is adequate, the coefficients $\alpha_{i}$ being the assigned individual values. The lowest is $\alpha_{s}$, an unconventional, multivalent, strategic or difficult half-move being usually preferred to a normal one, though we cannot say the same about the relationships between $\alpha_{1}, \alpha_{2}, \alpha_{3}$ and $\alpha_{4}$. Hence it follows that the value of the study rises both by amplifying the attributes $c_{81}$ $c_{6 s}$ and by improving the structure of half-moves, as a consequence of reducing $c_{65}$ and amplifying the others. The rule works the other way, too: supplementing $c_{6 s}$ to the
detriment of other types of half-moves will negatively influence the value of the study.
3.7. As far as coherence ( $c_{7}$ ) is concerned, it is generally accepted for a study to be more valuable, the deeper the relationship between the main stages of the solution. How to evaluate this attribute is not clear, so it is not stable, either. [EG would welcome an article attempting such a comparison of studies. AJR]
3.8. The dynamism of the pieces ( $c_{8}$ ) is quantifiable by the ratio of the number of active pieces to the number of pieces in the starting position (that is $\mathbf{c}_{1}$ ). Strictly, we denote as active the piece that makes at least one half-move during the main variation(s); but the scope might be broadened to include variations, tries and secondary variations.

The dynamism of pieces directly affects a study's value. Hence it is a stable attribute.
4. To conclude, we may say that attributes $c_{2}, c_{3}, c_{4}, c_{50}, c_{7}$ are either not measurable or their influence on a study's value cannot be defined; they are unstable attributes. On the other hand, attributes $c_{1}$, $c_{61}-c_{65}$ and $c_{8}$ meet the requirements of 1.3.1. and I.3.2. which confirm them as being stable.

V1. Pareto optimality in a restricted sense

1. In the case of the chess study, the equation I.1. has the following form:

$$
\mathbf{W}_{\mathrm{j}}=\mathbf{F j}\left(\mathbf{c}_{\mathrm{j}}\right)+\mathbf{S}_{\mathrm{j}} \quad \text { VI.1 }
$$

where $c_{s}$ is the set of stable attributes and $\mathbf{S}_{j}$ is a purely subjective component, depending on the way judge j perceives the unstable attributes, as well as on the way in which he is influenced by other characteristics as yet unidentified.

Arguments to reject the possibility of
function VI.1. being explicit (hence the algorithm of the aggregation, too) and to admit a maximum, fail. The meaning of such an extreme point would remain strictly individual, $\mathbf{F}_{\mathrm{j}}$ and $\mathbf{S}_{\mathrm{j}}$ having such a determination. [The intended meaning eludes us. AJR]

Such an operation means the investigation of the entire tree of half-moves emerging from every legal configuration of pieces (including the initial one) and going to a final position (as in chapters Im.2.a. and III.2.b.). It is the only possibility to select the paths containing the unique half-moves (perhaps interpolated with neutral half-moves) and finally to discover the study (or studies) which maximize the function VI.1. It is clear that such an approach brings us back to the fundamental problem of chess.
2. I think that Pareto optimality can have a restricted sense, too. In our case it is a state of a study in which it is impossible to improve any one of its stable attributes without worsening another; the reciprocal compensation of contradictory variations of two or more stable attributes is not admissible." [This last assertion seems debatable. AJR]

Many published works are capable of improvement from this standpoint. Examples of studies by famous authors will illustrate.

[^2]VI.1. L.van Vliet

Deutsche Schachzeitung 1888


Win

a8a6 4000.10 3/2
Win
The solution to VI.1.: 1.Qb4 and 1...Qd5(f3) 2.Qa4 + Kb6 3.Qb3+; 1...Qg2 2.Qa3 + Kb6 3.Qb2+; 1...Qh1 2.Qa3 + Kb6 3. $\mathrm{Qb} 2+\mathrm{Kc} 74 . \mathrm{Qh} 2+$. My version adds the move 1.b7, allowing the black queen to occupy not only the square c6 (with the well-known play) but also the square e4 (1... Qe4 2.Qa2 + and 3.Qb1 +), previously inaccessible. There is thus a higher consistency with the same material.
VI.2. H.Rinck

Chess Amateur, 1922, 2nd prize


Win


The solution of the study VI.2.: $\overline{1 . \mathrm{a} 6}$ Se6 2.Bd8 h2 3.a7 Sc7 4.B:c7 h1Q 5.a8B+ wins. My version, after $1 . a 6$, introduces the move $1 \ldots \mathrm{Sg} 7+(1 \ldots \mathrm{Sg} 3+2 . \mathrm{B}: \mathrm{g} 3$ or $1 \ldots . . \mathrm{Sd} 6$ $2 . \mathrm{a} 7 \mathrm{~h} 2$ 3.a8Q+ Se4 4.Qa3+) to which the right answer is $2 . \mathrm{Kg} 6$ (2.Kh6? Se6 3.Bd8 h2) etc. Again, the consistency of the study is increased with no change to the material.
VI.3. L.Kubbel Shakhmatny Listok, 1922


Win

The solution to VI.3.: 1.Sc6 K:c6 2.Bf6 Kd5 3.d3 a2 4.c4+ Kc5 (4...d:c3 5.B:c3) 5.Kb7 alQ 6.Be7 mate. We may observe that the sole function of the white knight is to extend the introduction. [IGM Benko made the same point in an earlier article in EG. AJRJ In the version, there is not only an economy of material (the study becomes miniature) but the play is more complex too, through the tries $1 . \mathrm{Bg} 3$ ? a 3 2.Be5 Kd5, and 1. Bf2? Kd5 2.c3 a3 3.B:d4 a2. After the key 1.Bh4 a3 2.Bf6, we enter Kubbel's solution. By removing the white king from the scene of operations (moving it to a8) the surprise of the mate is even bigger.
VI.4. F.Dedrle

Šach 1939, 1st prize


The solution to VI.4.: 1.Qf3 Bg4 2.Qf6+ Kh5 3.Kg2 Bh4 4.Qf4 Bg5 5.Qf7+ Kh6 6.Kg3 Bh5 7.Qf5 Bg6 8.Qf8 + Kh7 9.Kg4 Bh6 10.Qf6 Bg7 11.Qe7 wins. The version introduces a preparatory manoeuvre: 1.Qe6 + Kh4 2.Qe4 + Kg5 3.Qf3 Kh4 4.Kh1 etc. [First Rinck and then the computer cast serious doubts on Dedrle's composition. AJR]

The solution to VI.5.: 1.Sh2 +Kg 3 2. $\mathrm{Bf} 7 \mathrm{alQ}+3 . \mathrm{Sf} 1+\mathrm{Kg} 4$ 4.Be6+Kh5 5.Bd5 Qd4+ 6.Kh2 Qe5 + 7. $\mathrm{Kg} 1 \mathrm{Kg} 48 . \mathrm{Bg} 2$, setting up a fortress. The proposed version increases the consisiency of the play: $1 . \mathrm{Sh} 2+(1 . \mathrm{Se} 5+$ ? Ke3) $1 . . \mathrm{Kf} 4$ (1...Kg3 2.Sf1 + Kf4 3.Sh3 +) 2.Sh3 + (2.Sd3+? Ke3) $2 \ldots \mathrm{Kg} 3$ (2...Ke4 3.Bg6+) 3.Bf7 etc.
VI.5. G.Kasparyan

Shakhmaty (Riga), 1973, =2nd/3rd prize

VI.6. M.Liburkin

Shakhmatny Listok, 1928, 5th prize


Draw


Draw
The solution to VI.6.: $1 . \mathrm{Rh} 8+\mathrm{Kg} 7$ 2.Rg8+ Kh7 3.B:a2 R:a2+ 4.Kbl Sc3+ $5 . \mathrm{Kcl} \mathrm{Ral}+6 . \mathrm{Kb} 2 \mathrm{Rb} 1+$ 7.Ka3 $\mathrm{Ral}+$ $8 . \mathrm{Kb} 2=$. Th modification delivers more complex and dynamic play (the pawn moves, too): 1.Kg1 [1.Ra3+? Kb4 2.Bc3+ K:a3 3.B:d1 Rg7; 1.Rg3? Rd2 + 2.K:el R:b2 3.Rg8 Ka6] 1...Rf7 [1...Rh7 2.Rg3 Rh1+ 3.Kf2 Rf1+ 4.Ke2 g1Q 5.R:g1 R:g1 6.Bc3+1 2.Rc5+ Kb4 3.Bd4 Rf1 + 4.Kh2 $\mathrm{Rh} 1+5 . \mathrm{Kg} 3 \mathrm{~g} 1 \mathrm{Q}+6 . \mathrm{B}: \mathrm{g} 1 \mathrm{R}: \mathrm{g} 1+7 . \mathrm{Kh} 2$ etc.
VI.7. A.Troitzky

Novoe vremya, 1896 (Reconstruction 1922)

b5g7 0033.20 3/3
Draw
VI. 7 bis. Version Em.Dobrescu


Draw
The solution to VI.7.: 1.c6 Bg 4 (1...Se6 2.Kb6 Bg4 3.c7 Sd4 4.Kb7 Sb5 5.c8S) 2.c7 Sb7 3.c8S B:c8 4.Kb6 Sd6(8) $5 . \mathrm{Kc} 7$. The modification proposed in the version, though minor, leads to an increase of the consistency of the play, simultaneously with an increase of its dynamism: 1.c6 (1.g7? K:g7 2.c6 Bg 4 3.c7 Sf7) $1 . . . \mathrm{Bg} 4$ (1...Se6 2.Kb6 Ba4 3.c7 Bd7 4.Kb7 Sc5+ $5 . \mathrm{Kb} 8 \mathrm{Sa6}+6 . \mathrm{Kb} 7 \mathrm{Sc5}+7 . \mathrm{Kb} 8) 2 . \mathrm{c} 7$ (2.Kb6? K:g6 3.c7 Sf7) 2...Sb7 3.g7 (3.c8S? B:c8 4.Kb6 Sd6 5.Kc7 Ke7 6.g7 Be6) 3...K:g7 4.c8S B:c8 5.Kb6 and 6.Kc7.
VI.8. T.B.Gorgiev

Championship U.S.S.R.,1929, 4th place


The solution to VI.8.: 1.Bf6 +Kh 7 2.Rg7+ Kh6 3.Rf7 Kg6 4.Rf8 Sc6 5.B:d8 Kg7 6.Re8 Kf7 7.Rh8 Kg7 8.Bf6+ K:f6 9.Rh6t. The version makes the black bishop move to the critical square d8: 1.Bf6 $\mathrm{Bd} 8 \quad[1 \ldots \mathrm{Sg} 8 \quad 2 . \mathrm{Rg} 7+\mathrm{Kh} 83 . \mathrm{Bb} 2 \mathrm{Bd} 8$ In the version, the try $2 . \mathrm{Sf6}$ ? Qg 1 , is transferred to the main line solution: $1 . \mathrm{Sf} 6$ Qg 1 2.Sh5 [2.Re8 +Kg 7 3.Rg8 $+\mathrm{Kh} 6]$ $2 . . . \mathrm{Qg} 83 . \mathrm{Sg} 7$ etc.


Win


The solution to VI.10.: 1.d4 R:d4 2.e7 Rd6+ 3.Kg7 [3.Kf7? Rd8 and the white is in zugzwang] 3...Rd8 4.Kf7 [now, Black is in zugzwang] wins. Besides removing a pawn, the version enables the black king and the white knight to take part in the game: 1.Sd5 + Kd8 2.f7 Re6 + 3.Kh7 Re8 4. Kg7 wins.

Perhaps the versions VI.1.bis Vl.10.bis are not in optimal states (in the special sense defined here) of studies VI.1. VI. 10; they only illustrate ways of approaching such conditions.
3. Pareto optimality, in its restricted sense, is applicable to a large class of mul-ti-criteria systems in economy, technology, science, the arts, sociology: in other words to systems exhibiting stable attributes as defined under I.3.1. and I.3.2 above.

Bucharest, 1993-1994

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| THE COMPUTER SECTION editor: John Roycroft 17 New Way Road NW9 6PL London <br> *C* CORRECTION!! <br> GBR class 0004.10 list of reciprocal zugzwangs <br> reference: EG122 supplement <br> Lars Rasmussen informs us that the list was incomplete. The following 7 further positions raise the total from the 4121 in the supplement to correspond with the figure of 4128, from Ken Thompson, which appts on p. 7 of John Nunn's Secrets of Minor Piece Endings. <br> 1: (wKa6, sf7. Pb7; bKc7, Sc8) Wtm ( $\Leftrightarrow$ Btm ( 3) <br> 2: (wKa6, Sc4, Pb7; bKc7, Sc8) Wtm $(=$ ) Btm ( 3) <br> 3: (wKb6, S97, Pc7; bKd7, Sd8) Wtm $\Leftrightarrow$ Btm ( 8) <br> 4: (wKb6, Sd4, Pc7; bKd7, Sd8) Wtm (=) Btm ( 3) <br> 5: (WKd6, Sb4, Pc7; bKb7, Sb8) Wtm $\Leftrightarrow$ Btm ( 3) <br> 6: (WKc6, Se4, Pd7; bKe7, Se8) Wtm $\Leftrightarrow$ Btm ( 3) <br> 7: (wKe6, Sc4, Pd7; bKc7, Sc8) Wtm $\Leftrightarrow$ Btm ( 3 ) <br> John Nunn drew Lars' attention to the last of these. Lars writes: "I checked my program and found an error in the treatment of positions where White can make a move which captures and promotes at the same time. The seven missing positions are all of |
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this type." Lars asks EG to make clear that the construction of his list was based on Ken Thompson's data, but the error was Lars'.
Very slowly, the computer is bringing scientific method into chess. Part of this method is the discipline of repeatability and corroboration. To be rigorous in the case of endgame databases this discipline should apply to both the generation of the databases themselves and to any complex extraction of data from them. Since none of this work is, as far as we know, funded, we have to rely on the dedication and talent of the few who are appropriately interested and adequately equipped. EG hopes to continue reporting all such work.
$========-========$ *C* Ken Thompson's CD No. 4
Emil Vlasák, keen EG reader from the Czech Republic, and as computer specialist in his own right a frequent contributor to Ceskoslovensky Šach, informs us of the commercial availability in 1996 of Thompson's final compact disk containing databases for 5 -man endings with not more than one pawn. The distributor is ChessBase. Among the databases included is the long-awaited class 0011.01 (bishop and knight against pawn). However, at least one database (1003.01 queen against knight and pawn) currently contains a flaw.
As we understand the Thompson method, by now classic, of generating a database, it does so for a 'class' (ie the colours can be reversed) but requires a second process (ie the generation of another database) correctly to handle positions resolved to the advantage of the materially inferior side - including reciprocal zugzwangs. Such positions occur more frequently in 5 -man than in 4 -man endings, and more frequently in 6 -man than in 5 -man endings. We await confirmation that all significant databases in this extended sense are now on the market.
$=$ = = $=$ = = = = = = = = = = = = = *C* reciprocal zugzwangs
EG published (EG84 in 1986 - see also EG87.6336) the unique reciprocal zugzwang in the GBR class 4100, and (EG100 in 1990) the 25 such positions in the GBR class 4010. However, the Black-to-move-White-wins
solution depths were not published, and Lars Rasmussen now supplies them. The depths are distances 'to mate', not 'to conversion'. Readers may like to be reminded that a 'GBR class' comprises both the force represented by the given GBR code, where following the convention of endgame theory White is superior, and its colours reversed equivalent, where Black is superior. A similar application of the principle of economy lies behind the elimination (as far as possible) of rotations and reflections from computer-generated lists of positions.
GBR class 4100
a2c1 4100 a5c6d2 (18)
GBR class 4010
a2c2 4010 f3h2e1 (14)
a3c3 4010 f4h3e2 (13)
a3h1 4010 g3h5e5 (10)
a4a2 4010 d3b2b4 (6)
a4a7 4010 c6bse4 ( 3 )
a4b6 4010 e5h6d5 (11)
a4d1 4010 e4g3b4 (11)



anh 4010 f5g3e6 (11)
a4h8 4010 g6h4e4 (10)

b2a5 4010 d6g5c4 (9)
b3a5 4010 e8h4c5 ( 7 )
b4b1
b4b
b40
b4b6 4010 d586b8 (3)
b4e1 4010 t4h3c4 (11)
$\begin{array}{ll}\text { b4h } \\ \text { b4h } \\ 4010 & \text { e2h3f4 (8) }\end{array}$

c3a5 4010 b2a4c4 (6)
c3a8 4010 c7e8e5 (9)
c4a2 $4010 \mathrm{b5a3c} 3$ (3)
$\mathrm{c} 4 \mathrm{ab} 4010 \mathrm{~b} 3 \mathrm{a5c5}$ (5)
c4a7 4010 e6d8d6 ( 10 )
c4h1 4010 f2c1c2 (5)
c4h8 4010 g6h4e4 (9)
-

REVIEWS
editor: John Roycroft
17 New Way Road
NW9 6PL London
Creative Chess, by Amatzia Avni, Pergamon Chess, 1991. 140 pages, plenty of studies. ISBN 0-08-037800-5.
The Israeli author is a trained psychologist as well as an excellent composer. These two 'professions' show to advantage both in the choice of examples and in the accompanying text. There is a significant sprinkling of studies. This is no book that has come off the production line but rather one that is the result of acute observation and deep thought over a considerable period of time. It is
directed at players, but everyone can profit from the insights. Whether it is true, as the author believes, that creativity can be learned, is controversial - but if true, it probably really means re-leamed rather than just learned, because in the process of growing older we have lost the ability to create...

Chess Wizardry: The New ABC of Chess Problems. by John Rice. Batsford (London), 1996. 352 pages. ISBN 0713480130. Examples of chess problemists' jargon such as: Andernach chess, Allumwandlung, cyclic black correction, dual avoidance, Roman, Rukhlis, Stufenbahnung, Zagoruiko - bemuse most studies enthusiasts. Enlightenment is at hand with a copy of this impressively comprehensive work. The alphabetical reference part has 300 diagrams (major grouse: white queens are frequently mistaken for black), and is followed by 150 assorted problems for solving. Several pages cover tourney types and the international scene. Studies are mentioned only to exclude them from the work's compass.

Studies and Games, by Jan Timman. Cadogan (London), 1996. 192 pages. This is the English translation of the anecdotal and largely autobiographical Schaakwerk I: analyses en studies, published in Dutch in 1983 with 21 studies by Timman and a number by other composers.

The Urals Miniature, by V.Zholtonozhko and A.Selivanov, Moscow, 1996. 112 pages, 298 diagrams, figurine notation. In Russian.
This is a very presentable 'gallery' (three clear diagrams to the page, and with many a mugshot photo) of composers from the contemporary Urals scene, mostly in and around Ekaterinburg (Sverdlovsk). The edition size: 999. The study specialists featured are: V.Kalashnikov, V.Kalyagin, R.Khatyamov, V.Kirillov, B.Olympiev, S.Osintsev, and A.Selivanov himself, who, despite being a busy parliamentary deputy, is also quite a prolific and versatile composer who will not have his 30th birthday until July of 1997. Examples of the work of each are supplied
and, as the title indicates, never with more than seven men in a diagram. Non-solution text is somewhat conservative and wooden, with listed facts a-plenty leaving one wishing for some colour or humour.

Richard Guy's Chess Endgame Studies, compiled and presented by John Roycroft. Edited and published by Kenneth Solja ('Prime Actions', Helsinki), 1996. ISBN 951-96771-3-5. 194 diagrammed studies in 79 pages. The indefatigable John Roycris has done us all a favour. Here, in a we. produced soft-back from Finland, are the complete works of a neglected composer from former days. The chess output of Richard Guy endured for so short a period that unless one was a reader of the British Chess Magazine between the twelve or so years from just before WW II one would be unlikely to have come across his work which, due to the constraints of war were destined mostly for home consumption.
Given access to the composer's files and after much correspondence with Calgary, where Richard holds Canadian citizenship, the compiler has resurrected the work of these turbulent years and presented us with the whole of the composer's workshop. There are 194 works, including some previously unpublished. Not all are sound. Whose are? Imperfections have been pointed out and thanks to a handful of volunteers blemishes have in many cases been remedied. Forget the casualties, though. Modem technology unearths them all the time. This book throws welcome light on a neglected British composer who, had he not been so immersed in his beloved mathematics, would occupy a much higher place.
Fortunately this distinguished mathematician chose, if for all too brief a period, to bring to bear on chess the logic and geometry of his profession. Chess was something he just picked up, to be discarded when he'd done enough of it. He played the game at university level and in extending what he taught at school he was a pioneer in mathematical recreations and chess. At the end of T.R.Dawson's editorship of the studies column of the BCM it was Richard who took
over stewardship. The present reviewer, home on leave from rubber planting in Malaya, first met him in 1950. He arranged a meeting with 'TRD', who by coincidence was a rubber chemist, and, a little later, introduced me to Harold Lommer and Hugh Blandford at the former's Mandrake Club in London's Soho district. A further link in the chain was forged when Richard took up an appointment at the University of Singapore, where we often met. This was invariably advantageous to me. Puzzles of all kinds were he order of the day and I vividly remember rying to fit his beautifully made polyhedra into their appointed spaces.
His chess studies are both instructive and entertaining. The biographical notes accompanying them would make a fascinating booklet of their own. He assures us, for instance, that much of his serious work is done sleeping. The studies come in three sections: (A) pawns only; (B) knights, bishops and rooks; (C) with queens. Surely nobody [until Zinar. AJR] has done so much with pawns since Grigoriev; there are 58 in this category alone. I doubt very much that his aim was ever to win prizes though there is a first prize winner among this collection. Before ending this brief foray into chess we should remember that Richard initiated the all-numerical coding of chess force which, with a minor modification to aid the memory (and carrying his approval), is gradually gaining in acceptance and use: we refer to the GBR code. As a final point of interest among many too numerous to mention, we can learn how the word 'feint' came to be absorbed into Russian chess endgame literature. You too are likely to become absorbed by this book.
Mike Bent, 5 xii96
Considering that his composing spell spanned only a dozen or so years (and is unlikely to be extended, though his activity in other fields is undiminished), Guy's output was exceptional. Biographical and background material are included, but, sadly, none of the available photographs could be reproduced in acceptable quality.
The book is available for UK£5.- or US\$10.or DM25.- (postage included - choose your own currency!!), from:

Kenneth Solja
Kaksostentie 5 F 101
SF-00740 HELSINKI
SUOMI/FINLAND
FIDE Album 1986-88 Annexe, ed. Denis Blondel and others, 'Editions feenschachphénix', 1996, 240 pages. In French. The solutions are non-figurine. There is no ISBN.

There are 71 studies in this all-genres unofficial expansion of the official FIDE Album. The basis of the expansion is to include compositions awarded 7 points or 7,5 points by the judging triumvirate in the respective sections. The normal threshold is 8 points. Each of the eight sections has its own thematic index, the interesting scheme for studies being due to our EG-colleague Alain Pallier: there are ten major headings, with a sub-division often accompanied by a definition. The ten headings: mates, stalemates, promotions, batteries (in detail), tactical motifs, domination, logical combinations (choice,preparatory, systematic), zugzwang, strategic elements (a miscellany) and positional draw.
We note the French distinction of pièce to include figure and pion, correponding respectively to the English 'man', 'piece' and 'pawn' (distinctions not endorsed by FIDE in the Laws of Chess). The term sacrifice de délestage, signifying the forced capture by Black of a white man to bring about stalemate, is new to us.
While every Album can be criticised for limitations of one sort or another - compositions not submitted cannot be selected; every judge has his likes and dislikes (the AJR study submitted received 3,2 and 1 points by the three judges to give a total of 6); commitee criteria are notorious for delivering compromises - this collection is very worthwile. The points awarded by each judge are, probably rightly, not reproduced. The study solutions are quite extensive and the volume is beautifully laid out and beautifully produced.

Charged Moves and Progressions - Nico Cortlever's Endgame Studies, by Harrie

Grondijs, Rijswijk 1996, 218 pages, 224 diagrams. ISBN 90-74827-22-5.
All, or probably all, of the late Nico Cortlever's 80 or so studies are here, thanks to the compiler, in a book that is a pleasure to handle. We envy both the presentation skills and the mastery of the supporting technology.
The author frankly states that the studies are as seen through his eyes. Knowing the author we can guess what to expect, and our expectations are fulfilled. What a pity that linguistic solecisms, which with the application of care could have been eliminated, mar good communication between author and reader for the author is an acute observer with many valuable observations for our benefit. For example, the title seems to be explained by the deliberate contrast between a highly 'charged' individual move, and the more dissipated effect of a multi-move manoeuvre. It is really good to have this significant, idiosyncratic and compelling, Dutch composer's work in one place. We applaud, and from the heart. As a very strong player Cortlever had the ideas and the abilities to create subtle studies that demand much from the solver-analyst. One might say (this is not Harrie speaking) that his style resembles that of the also recently deceased Estonian Jüri Randviir - but with two or three times as many pawns. Complex stuff.
The solution to almost any study by Cortlever cries out for careful and precise exposition, but, we ask, does it need jargon? Harrie loves giving names to things. He frequently feeds the names back in capital letters. The 9 lines at the top of page 64 carry 16 examples.
In our view the book would be improved by being shortened - but then it would no longer be a book by Harrie. Does the reader (who will self-select to be studies-aware, one of the converted) need to be told in the annotation to a move that 'As a pawn progresses towards the promotion square it amasses importance (as a function of the likelihood that it will promote)'? It is true that one can skim, if not skip, such passages, but then one runs the risk of missing something valuable. We fail to find BORDERCOLLY - a term Harrie is partial to - in the (complete) Oxford

Enylish Dictionary. We find only Border terrier. Moreover a collie is a sheepdog, and sheep come in flocks, not in herds, a term reserved for cattle or wild animals. Perhaps BORDERCOLLY, figuring in Harrie's 40-page glossary, will now get into the next edition of the $O E D$, which is descriptive, not prescriptive.
We should have liked to discuss some of Harrie's terminology but were deterred by the disclaimer 'The actual formation of the studies according to superthemes, themes and style is to some extent arbitrary, i.e. depending on what visible or invisible aspects one chooses to relevate' (sic).
Lest our review be deemed negative here is an admiring endnote. Each study is laid before us up to three times, generally like this: first, a 'constructive remarks' presentation, then the 'solution', and finally a 'story line'. As well as forming a vehicle for the author's talents it is a treatment with a future.

## EG Subscription

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It is of course possible to save charges by paying for more years or for more persons in one country together, like some subscribers already do.



[^0]:    No 10543 Pekka Massinen 1.Kb5/i b3 2.Ka6 Ba7

[^1]:    * The "half-move" is the change of position, in accordance with FIDE rules, operated alternately by the two parties. A white half-move and a black half-move following it are together a "move". [Computer chess is responsible for the neat and serendiptous synonym 'ply' for a half-move. AJR]

[^2]:    - Vilfredo Pareto (1848 - 1923), Italian sociologist and economist, made significant contributions to the mathematics of the social sciences, including economic theory. Generally, a 'Paretian optimum' is the state of a system in which it is impossible to improve the performance (utility) of one of its elements while avoiding a corresponding deterioration in the performance (utility) of another. Given a Paretian optimum in a chess study, no attribute will be improved except at the expense of another attribute. In the present paper this rule has been accepted only for the stable attributes (as defined); this is why we use the expression "Pareto optimality in a restricted sense".

