POPULAR CHESS No. 3

THE POPCHESS WORLD COMPUTER CHAMPIONSHIPS
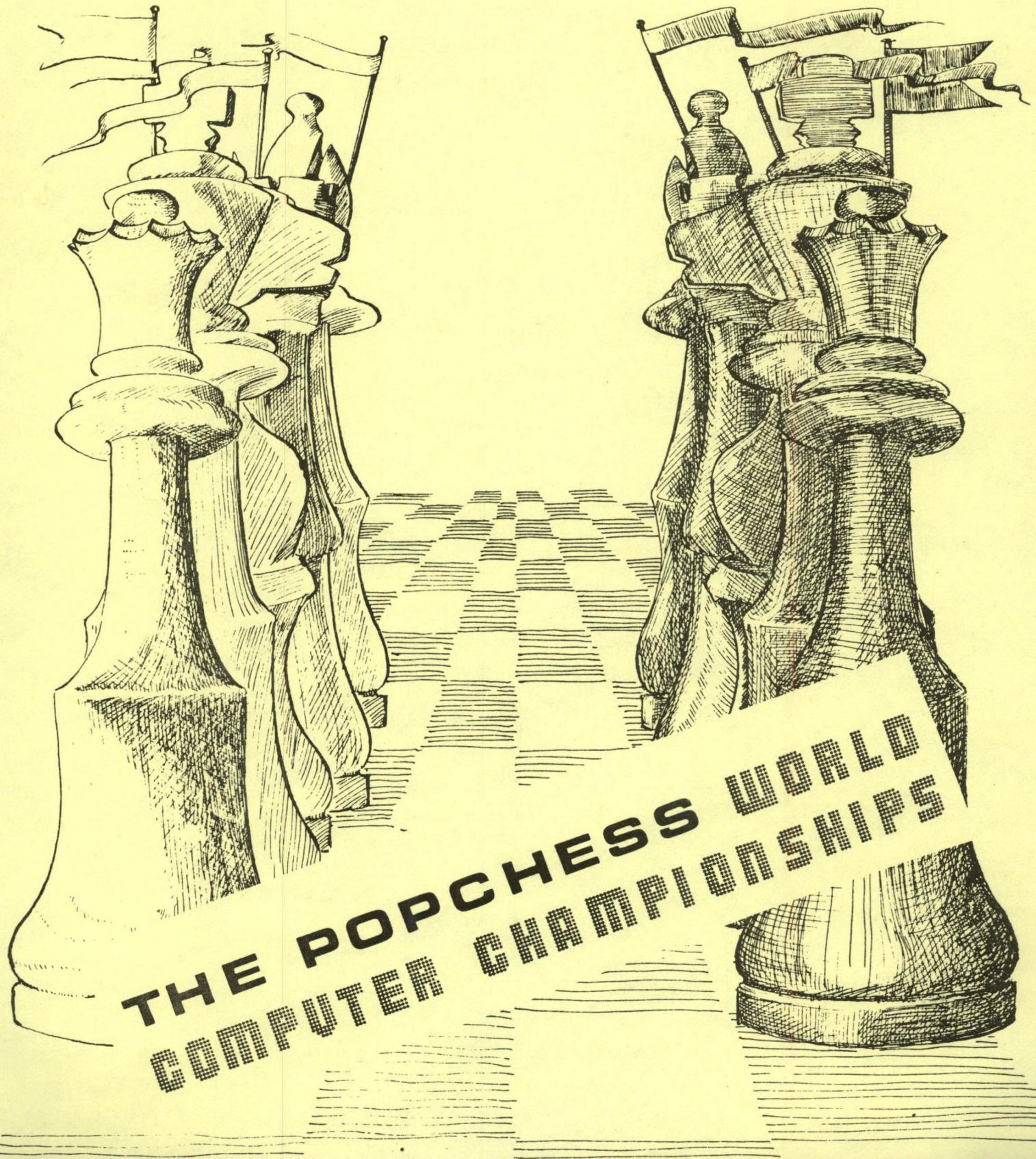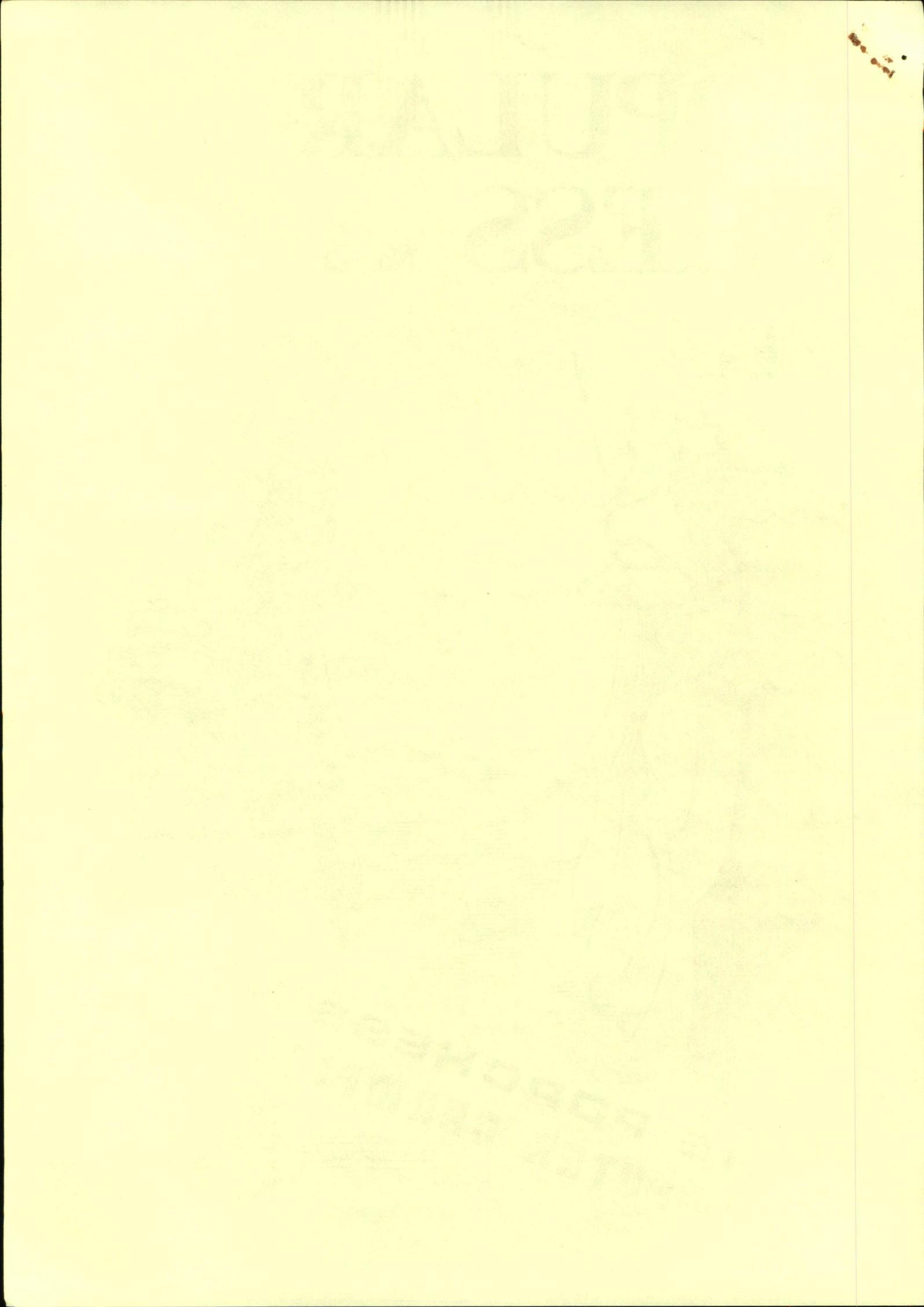
THE POPCHESS WORLD COMPUTER CHAMPIONSHIPS

Analysed by International Master Michael Basman

The Contestants: Five of the leading computers on the market today.

1. From Fidelity Electronics, USA: The Sensory 9 Challenger
    weighing in at £169.

2. From Hegener & Glaser, Germany: The Mephisto II Portable
    costing £198.

3. Designed in Germany, assembled in Ireland: The Conchess Ambassador
    Sensory Board at £225.

4. The British challenge: Scisys Chess Champion with the latest Mark VI Module
    costing £270.

5. Finally, the undisputed 1981 champion computer, old man Morphy Great Game Machine
    of indeterminate price, but rumoured to be going for £125 at the
    Chess Centre, Harcourt Street, London.

The Tournament: All these machines have to play each other twice, once with white,
once with black, at their best tournament levels. The Sensory 9 was put at level 7
(40 moves in 2½ hours); Mephisto level 6 (2½-3 minutes average per move; Conchess
tournament level T5 (40 moves in 2½ hours); Scisys 40 moves in 2½ hours; and
Morphy was put on level 8 (40 moves in 2 hours). These time limits might see to bias
unfairly against Mephisto, but on the other hand, the next level up for Mephisto was
10 minutes average per move, so why should all the other programmes be dragged down
due to the inflexibility of Mephisto's levels of play?

Conchess was played at tournament 5, but occasionally had to be transferred to
practice level 4 when a game had to be interrupted. In general it plays better on
practice level 4 due to the longer time it thinks over the move (5 minutes average).

Morphy was playing without his Gruenfeld and Capablanca Opening and endgame modules.

The games were played as a double round tournament between 4 of the machines.
Scisy Mark VI came in at the end and played off all his games then.

The encounters game by game:
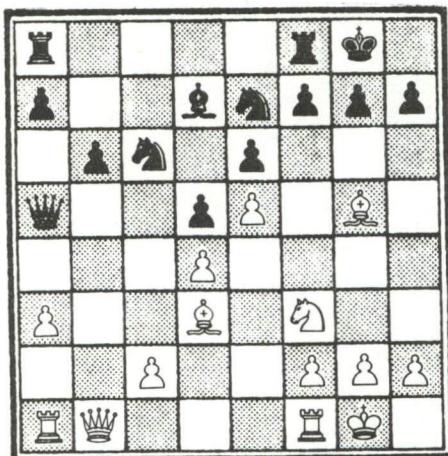
Game 1: Morphy v Mephisto

Morphy gets into early trouble with his king in the centre, but manages to fight
his way to a superior ending in which he allows a draw by repetition due to not
realising the strength of a passed pawn.   ½ - ½

Game 2: Mephisto v Morphy

Debacle in the opening. Morphy exposes his queen and gets it trapped neatly in
the shortest game of the tournament.

1 e4 e6 2 d4 d5 3 Nc3 Bb4 4 e5 c5 5 a3 Bxc3+ 6 bxc3 cxd4 7 cxd4 Ne7 8 Bg5 Nbc6
9 Nf3 0-0 10 Bd3 Bd7 11 0-0 Qa5? 12 Qb1 b6??

Diagram 1

Black's last move, ... b6 closed the door behind the black queen.
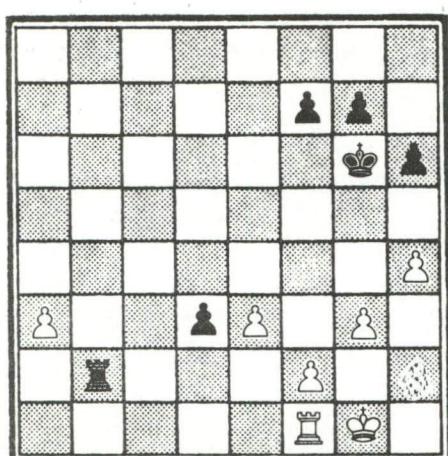
13 Bd2! Qa4 14 Bb5   1 - 0

Game 3: Morphy v Conchess

Sounder opening play (Conchess castles, develops his pieces and controls the centre; Morphy doesn't castle and brings his queen out too early) gives Conchess an early tactical chance which he passes up. Still, he manages to stop Morphy castling and a misguided exchange lets the Conchess rooks into the attack.

Morphy's game looks terminal until he tries a desperate shot that works - and soon Morphy has castled and transposed into an ending a pawn ahead. Then the roof falls in as Morphy, not for the first time, and certainly not for the last, overlooks the strength of a passed pawn.

Diagram 2

Any normal person would play Rd1 here, to blockade the pawn, and then bring up the white king. But Morphy thinks he can attack the pawn and save his a3 pawn as well. He plays 1 Rc1 Ra2 2 Rc3?? allowing 2... Ra1+ 3 Kg2 d2 and the pawn goes through to queen.

Game 4: Conchess v Morphy

Conchess makes a bad positional error in considering a side pawn equal to a centre pawn. He also loses bishop for knight in an open position.

Morphy once again refuses to castle, but tricks Conchess into losing a piece in a piece of middle game tactics. 0 - 1

Game 5: Morphy v Sensory 9

Morphy shows a tendency to release his opponent's pieces by exchanging too readily. However, it is Sensory who over reaches himself by exposing queen and then going on a tactical expedition before having completed development. Despite winning a pawn, Sensory gets his pieces badly offside and in danger of becoming trapped. His king also falls under attack in the ending. However, in the tactics Sensory is clearly superior and comes out a piece ahead. Morphy has chances to save the ending, but does not push his passed pawns intensively enough. Sensory manages a complete blockade and finishes elegantly. 0 - 1
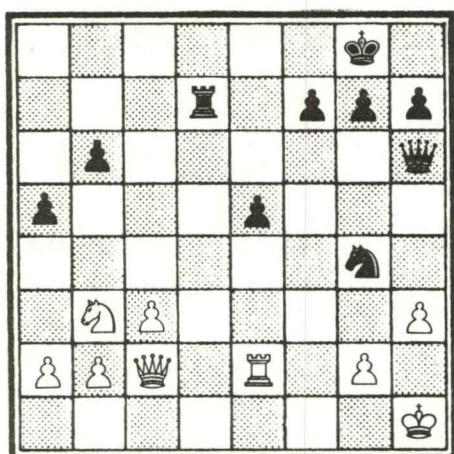
Game 6: Sensory 9 v Morphy

After ten moves Sensory has castled but Morphy is playing a dangerous game with his queen, and then castles long. Sensory attacks and wins a piece but then gives some material back to come to an ending of R+P v B+Kt. This game eventually abandoned as a draw as Sensory makes no progress.

Game 7: Conchess v Sensory

Conchess achieves a good opening position, but plays aimlessly and lets Sensory with his aggressive play take over the game and push him off the board.

Diagram 3

Conchess needs to trade queens to ease the pressure, but unfortunately, 37 Qc1 loses to ...Qxc1 and ...Rd1+. Maybe his best chance is 37 Re1, guarding the back row, but instead he plays 37 c4, and after ...Ne3 he is finished: 38 Qe4 Rd1+ 39 Kh2 Nf1+ 40 Kg1 Ng3+ 41 Re1 Nxe4 42 Rxd1 leaving Sensory a queen against rook and knight, plus an attack.
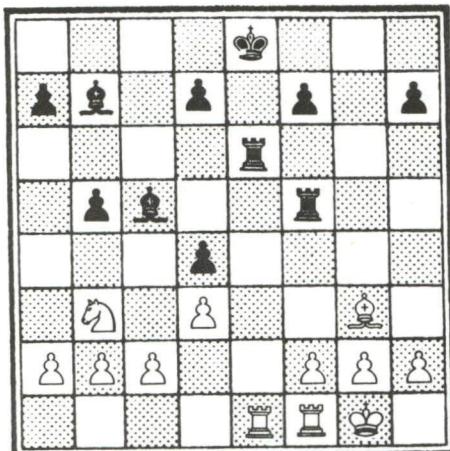
Game 8: Sensory v Conchess

Here Conchess's Bird Defence to the Ruy Lopez in unsatisfactory and Sensory goes into attack with his queen. Conchess decides to forfeit castling rights rather move a pawn, weakening his king side.

Sensory begins a tactical skirmish and soon Conchess's game is in ruins; but then Sensory's weakness - to attack with what he's got, rather than bringing up the reserves - allows Conchess to get the queens off and escape into an ending a pawn down.

Now Conchess plays weakly; he tries to maintain pieces in advanced positions rather than redeploying them more effectively, this is rigid thinking. Finally he falls for a simple tactical device and it is all over.

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Diagram 4

23 ...KF8 is the blunder here and
after 24 Nxc5 Conchess has set himself up for a simple
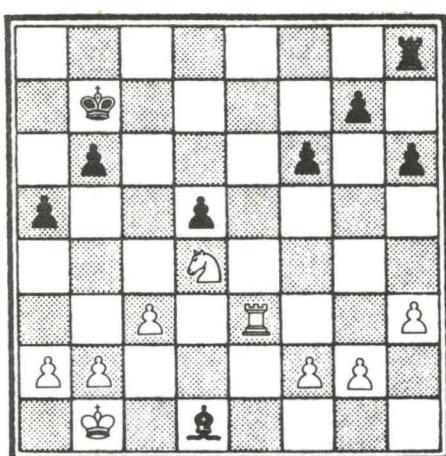fork by 24...Rxc5 25 Rxe6 dxe6 26 Bd6+

Game 9:   Conchess   v   Mephisto II

The big match of the middle micros. Sensory 9 has scored almost 100%,
Morphy is headed for the scrapyard, so who will challenge for second position?

The game starts wildly and Mephisto is out gunned in the opening. It looks
like Conchess should castle and then launch   into the attack against an exposed
enemy king. But what does he do? He exchanges queens into an ending a pawn down.
Passive, passive. Yet Mephisto is now unwilling to move his king and forfeit
castling rights, though here this was the correct thing to do. He goes for a tactical
sequence which only gives his pawn back and lands him in a worse position.

The play levels out. Conchess has the better game but cannot punch a hole in a
paper bag, so Mephisto starts punching holes in...himself!

A nice tactical sequence gains Mephisto admiration but no material, and at the
end of it his disadvantage is more pronounced - weak bishop against strong centralised
knight; isolated pawn in the centre the same colour as his bishop; and Conchess has
a dangerous open file for his rook.

All these advantages add up to Conchess picking
up an extra pawn, but Mephisto is able to trade off
bishop for knight and also exchange the isolated
queen pawn to arrive in a rook and pawn ending in
which he has good drawing chances.

But these drawing chances only exist if you keep
the rooks on; it is fatal to exchange into a king
and pawn ending, as Mephisto does and this end game
weakness costs him a possible half point.

Mephisto does not even defend the K+P ending very
well, and Conchess seizes the chance to force a passed
pawn through. Here at least is one computer which
understands the importance of passed pawns in the
ending.

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Game 10: Mephisto v Conchess

Once again Mephisto is raped in the opening, and Conchess builds up an attack to win probably the most elegant game of the tournament, ranking with Sensory v Mephisto for the star prize.

Game 11: Mephisto v Sensory

Sensory is just more active through the game. Sensory forces a passed pawn, and in the ending he uses his king, whereas Mephisto leaves his on h1 until the last minute.

Game 12: Sensory v Mephisto

One of the best games of the tournament. Sensory plays a hypermodern opening and dances around like Mohammed Ali 'float like a butterfly, sting like a bee'; his knights float and his bishops sting, and soon Sensory has established strong posts for his pieces in the now clarified centre. But Sensory goes astray, drifting into an unfavourable situation which Mephisto exploits to win an uneasy material advantage. Now the position is tactical, and in tactics Sensory has no equal; not on the computer board anyway. A dazzling array of cutting blows has Mephisto running for an ending three pawns down. Yet here the fortunes swing, because Sensory does not use his king, and just thinks the pawns can queen themselves. He rushes them up the board like so many soldiers in the charge of the light brigade. Mephisto's knight and king perform the function of the Russians as Sevastopol, and chop off the pawns as they fly by. Eventually, the smoke clears and Sensory is now only one pawn ahead and that too a blockadable one. Alas for the Mephisto, he does not understand the need to keep out of the king and pawn ending. Meekly, he allows his knight to be exchanged for a bishop and Sensory queens a pawn swiftly and wins the game. 1 - 0
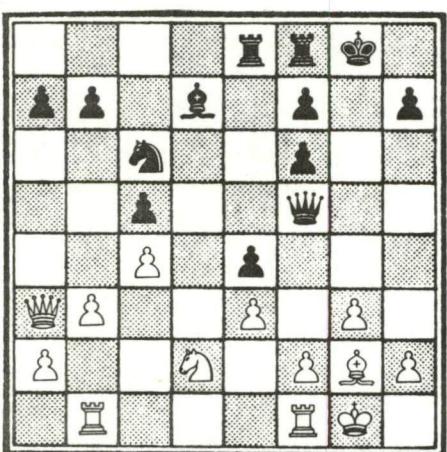
Game 13: Morphy v Scisys Mark VI

The Scisys Mark VI, a late comer to the tournament, began inauspiciously. Morphy's greater activity gradually forced the younger machine onto the back row, but at the decisive moment Morphy missed the winning continuation, slipping into a bishop of opposite colours ending two pawns down which however, Scisys did not have the technique to win. ½ - ½

Game 14: Scisys v Morphy

White against Morphy, Scisys once again had difficulty in controlling his fair share of the board, and then made a disasterous combination which exposed his king.
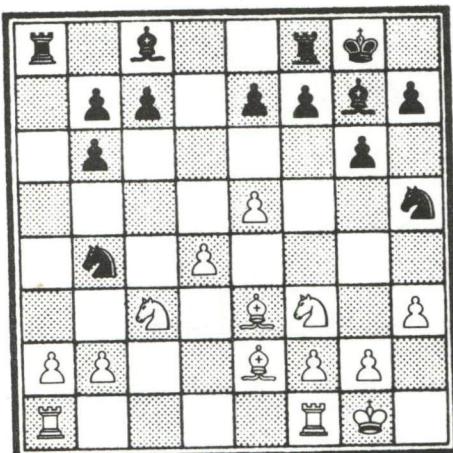
Diagram 6

Scisys here made a materially 'correct' combination in playing 1 Nxe4 Rxe4 2 Bxe4 Qxe4 3 Qxc5, gaining rook and two pawns (7 points) against bishop and knight (6 points). But in this position the white rooks are not particularly active, nor are the pawns a queening danger. Added into the equation must be the chronic weakness of the white squares around the king, and after Morphy's next move 3...Bh3 which threatens the rook at f1 and mate at g2, Scisys was forced to bale out into an ending a piece down with 4 Qd5 Qxd5 5 cxd5 Bxf1 6 dxc6 Bb5. Note that 4f3 does not save white after 4...Qc2! 5 Rf2 Qxb1 ch.

Morphy eventually won the ending. 0 - 1

Game 15:   Scisys v Sensory

Now Scisys faced the tournament Goliath and did a catapult job on him. He gained a tremendous spatial advantage in the opening which he eventually converted into a win despite stubborn defence from Sensory 9. The game was marked by a peculiar and rather inexplicable tactical episode.

Diagram 7

Here Scisys could win the trapped knight at h5 by 1 g4, but declined to do so, fearing 1...Nc2 2 gxh5 (2 Racl allows the black knight to escape by 2...Nxe3 3 fxe3 Ng3) Bxh3 3Rfc1 Nxal 4 Rxal gxh5 when black has his 'rook and two pawns against two minor pieces' though most players would have preferred the minor pieces.
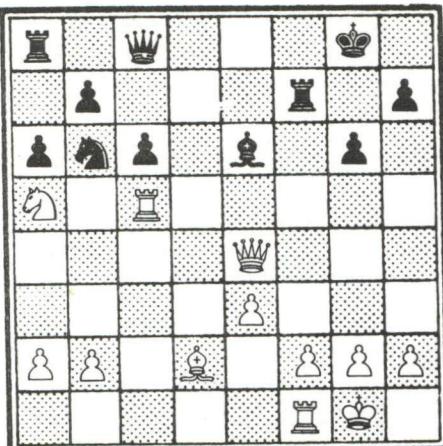
Instead Scisys guarded c2 by playing 1 Rfcl and now Sensory could play 1...f5, but chose 1...Bf5?!? running into an even worse version of the above material transaction. : 2g4 Nc2 3 gxf5 Nxal 4 Rxal. Scisys however, refused to be drawn and chose to play 2 Nel instead, guarding c2 once more.

The game continued...

Game 16: Sensory v Scisys

That last defeat was surely an aberration, and here is Sensory 9 moving smoothly into top gear while Scisys retreats to the back of the shop.
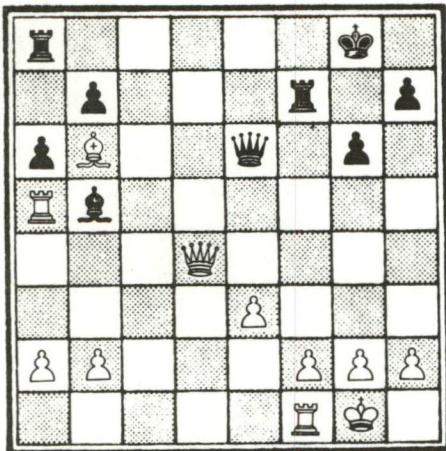
Diagram 8

21 moves have been played. Sensory is a pawn up, and any human player would also by now be glancing towards the black king side with ideas of mating on the dark squares with his queen and bishop. But computers do not like such nebulous plans, and Sensory strikes out with 22 Nxc6! A powerful sacrifice which will win two pawns if accepted (22....bxc6 23 Rxc6 Qd7 24 Rxb6 or Rxe6). But now watch how Scisys pulls himself out of this desperate situation. He plays 22...Qd7!, hitting the unguarded bishop at d2 which now moved to a5. (Sensory should have consolidated a two pawn advantage with 23 Nd4; but this idea of consolidation is not an easy one to put into a machine as aggressive as the Sensory; or into any computer for that matter.)

There followed: 23...Bd5! 24Qd4 Bxc6 25 Bxb6 Qe6 26 Ra5? Bb5 and by now the position had radically altered with several of Sensory's pieces in offside positions.
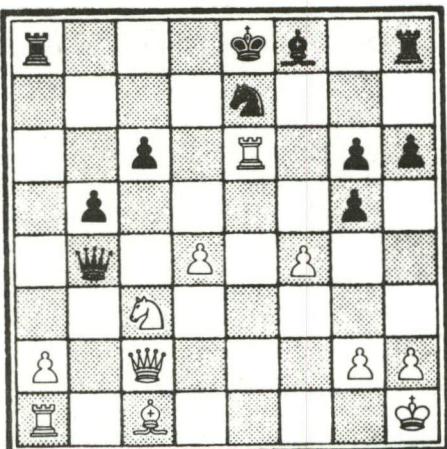
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Diagram 9

After 27 Rc1 Rd7! Sensory found itself in an awkward tactical situation. His queen is tied to the defence of the bishop at b6, but if he plays 28 Qc5, then 28...Rd5 forces the queen away and picks up the bishop.

Thus, instead of 28 Qc5, Sensory tried 28 Qb4 hoping after 28...QxB6 29 a4 to regain his piece due to the pin on the bishop at b5. Unfortunately, this did not succeed either. Scisys played 29...Qd8! threatening a back rank mate if the bishop were taken. White answered 30 Re1 and after 31...B6! had the mortification of losing his trapped rook at a5 as well! Sensation! Scisys had scored 2 -0 against the tournament leader and was the only machine to exploit the anti-positional aspect of Sensory's over-exuberant tactics.

Game 17: Mephisto v Scisys

In this round Scisys commits equally blatant daylight robbery; with the Scisys king in the centre, Mephisto attacks strongly, but attacking the king can involve long ply decisions which can often be outside the range of the attacking computer. The defender, on the other hand, need only capture the offered material and hope for the best. Mephisto founders ...... and falls ......

Diagram 10

Here Mephisto played a false combination with 21 Nd5? probably thinking that after 21...cxd5 22 Qc6+ he could pick up the rook at a8. However, a slightly further look reveals 22...Kf7 23 Qxa8 Kxe6 and white is still a piece down.

Scisys did capture 21...cxd5 and Mephisto's next move was even more pathetic. 22 Qc5? (the concept of keeping queens on when your opponent's king is exposed or when you are material down is obviously not in Mephisto's brain cells. He is merely attempting to save his pawn at d4).

Scisys gratefully exchanged the queens and won the ending without trouble.

After this game Scisys had 3½/5 and was firmly in the running for first place, only needing to score 2/3 against the back markers Mephisto and Conchess to tie with Sensory 9 and win the tournament on Sonneborn - Berger count.
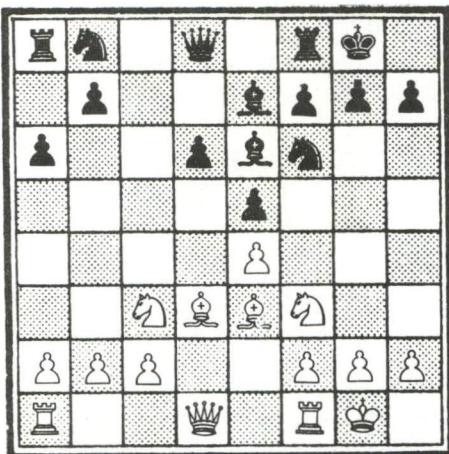
Game 18: Scisys v Mephisto

This looked like a draw for a long while, with the machines quickly exchanging off into a double rook end game. For once Scisys became too ambitious, driving the enemy king into the open with his two rooks and paying the penalty when the king became too active. 0 - 1

Game 19: Conchess v Scisys

A disaster for Conchess. That tactical weakness due to its laborious full-width search method of analysis led it to lose a piece in simple manner. On move 14 Conchess had to capitulate.
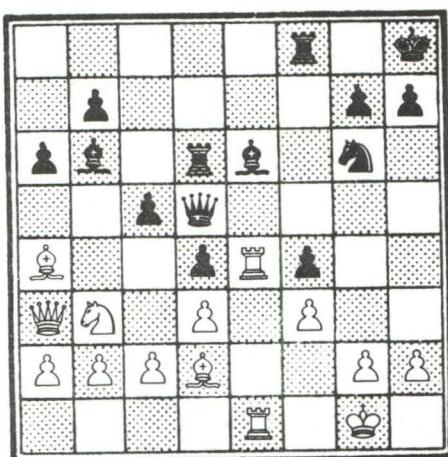
Diagram 11

How it happened: Conchess has a predilection for playing Nd5 in Sicilian positions of this sort. Here the move loses a piece quite quickly 10 Nd5 Bxd5 11 exd5 e4! forking knight and bishop.

So the last round dawned, with first place still at stake. All the Sensory programmers were on the sidelines cheering Conchess on. But could the Conchess possibly hold the Scisys with its tactical glass chin that had been so ruthlessly exposed in the last game?

After a tense, closely fought opening the inevitable occurred when Conchess played 23...Kh8-g8 in this position:

Diagram 12

Conchess had previously played ...Kh8 to avoid any upsets along the a2-g8 diagonal (see the black queen awkwardly lined up at d5, and the white bishop waiting menacingly at a4?), but now, running out of ideas, it decides to play this waiting move.

Scisys immediately leapt for the throat with 24 Nxd4!! a superb sacrifice, which if accepted would be followed up by 25 Rxe6 Rxe6 26 Rxe6 and if now black continues 26 ...Qxe6, 27 Bb3 pins the queen to her consort.

Conchess refused the knight and struck back fiercely with 24...c4, which not only blocks the white diagonal from a2, but also opens his own bishop's diagonal leading to the white king.

Maybe 25 c3 was good enough here, but Scisys thinks it sees something better with 25 dxc4 Bxd4+ 26 Kh1

Diagram 13

Very clever. There is now no escape for black's queen which does not lose the bishop at d4; for example 26...Qc5 fails to 27 Bb4. But Conchess finds another desperate resource with 26...Bxb2 offering an exchange of queens. I think Scisys should have accepted this, by playing 27 exd5 Bxa3 28 Rxe6 with an extra powerful passed pawn. Passed Pawns? what do computers know of passed pawns? Scisys carried on down the tactical trail with 27 Qxb2 Qxd2 28 c5! and suddenly stops as it realises something horrible.
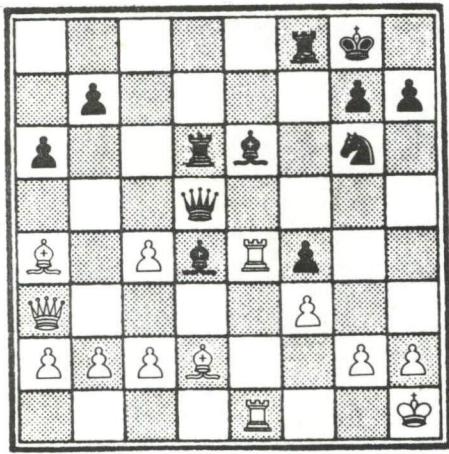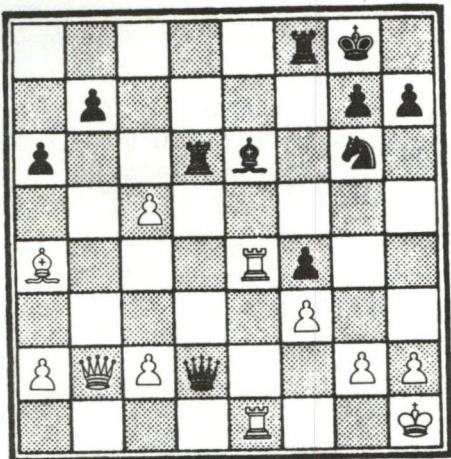
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Diagram 14

The rook at d6 cannot move without losing the bishop at e6; but the bishop at e6 can move. Conchess played 28...Bf5! 29 cxd6 Bxe4

Tragically, because of the threat of back rank mates, the bishop cannot be recaptured and Scisys came out of this tactical fling a piece down.

Conchess won in another ten moves and the tournament ended:

1st Sensory   5½

2nd Scisys   4½

3rd Conchess 4

4th Morphy   3½

5th Mephisto 2½

TOURNAMENT TABLE

	Computer	1	2	3	4	5	Total	Position
1	Sensory 9	x	0 0	1 1	½ 1	1 1	5½	1 st
2	Scisys Mk VI	1 1	x	0 1	0 ½	0 1	4½	2 nd
3	Conchess	0 0	0 1	x	0 1	1 1	4	3 rd
4	Morphy	0 ½	½ 1	0 1	x	½ 0	3½	4 th
5	Mephisto II	0 0	0 1	0 0	1 ½	x	2½	5 th

SUMMARY

The result of the tournament is a triumph for the Sensory 9. His overall play is aggressive and tactical, but does not play as unsoundly with his queen and king as Morphy. In most games he manages to castle. There is a tendency to launch into the attack before mobilisation is complete, and this sometimes lands him in trouble (for example against Morphy and Scisys). However, his tactical superiority is usually enough to haul him out. Against Scisys, however, this emphasis on tactics without regard to the positioning of his pieces cost him the game.

Sensory's end game play is fair, in many cases using his king well. But though he understands the need to push passed pawns he does not realise the need to 'shepherd' them past enemy obstructions.

Scisys Mark VI was the only machine to dent the Sensory 9, yet achieved superiority against none of the other three competitors. Its result was strangely ambiguous; for much of the game it seemed content to lie back on the ropes and only came up when really under pressure; many of its victories were due to the opposition over-reaching itself in superior positions, and it scored two losses when it, too, over-reached itself. If we pursue this analysis further we can see that in the games where Scisys was involved, six out of the eight played were wins for black; when the other four computers were involved only among themselves, the score was 7 -5 in black's favour. Part of the

reason for the success of the black players must lie in the fact the initiator of a combination needs to look ahead at least one ply further than his opponent (a ply means a half move - that is one white or one black move; looking one move ahead would mean two ply, that is one white plus one black move.).

Conchess would come out as a rather drab specimen were it not for his sparkling display against Mephisto as black and his heroic defence in the last round game with the Scisys. He plays a sound opening in most cases but is not alive to tactical opportunities or threats, especially when they are of a certain ply depth. This was the reason for at least two of his defeats. There is a general passivity in the middle game which causes him to gradually lose ground as his pieces take up worse and worse positions; this tendency is noticeable against the more aggressive machines Morphy and Sensory 9.

His end game looks promising, particulary the incisive win against Mephisto in a king and pawn ending.

Morphy the grandpa of the event, sizzles along with a microprocessor you could fry an egg on. His opening is just too much - he always seems to find something else to do rather than castle, and his early queen sorties only add to the difficulties.

Once in the middle game he is surpassed only by the Sensory 9, and typically their individual encounters are gritty tactical affairs.
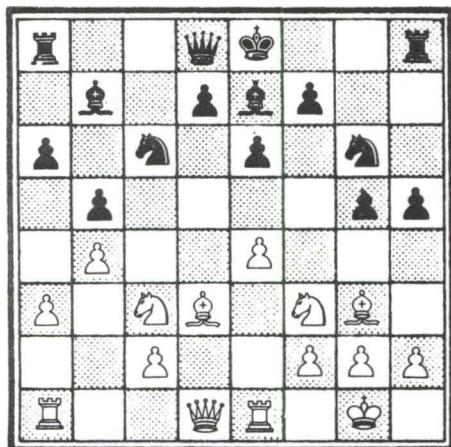
Morphy is poor at the endgame because he does not recognise a passed pawn as a danger until it has reached the seventh rank. This weakness cost him dear on at least two occasions.

Mephisto had been billed as the rising German star, but in this tournament, though showing overall COMPETENCE, was consistently trumped in specific areas of the game where he is inferior to the other machines. In the opening he achieves lost positions to Conchess; in the middle game he is overrun by Sensory 9; in the ending he can hold his own but makes significant errors in not using his king adequately and permitting the exchange of pieces into lost king and pawn endings. Yet in most of the games he is fighting and by no means a pushover. The two best games of the tournament were played against him which recalls the saying 'it takes two to make a good game'.

TACTICAL ASSESSMENT

In most cases the Sensory 9 was a lot more efficient than the other machines; the "How would you do" positions record one instance of Sensory finding a winning continuation which Conchess took 15 minutes over. Sensory seems to behave more like a human chess player in selecting some promising line and then going further down it, whereas Conchess seems to look at all the possibilities one move ahead, then two then three and so on. Not surprisingly this is quite time consuming, and even on its highest tournament level (40 in 2½) it still can fall for things like this.
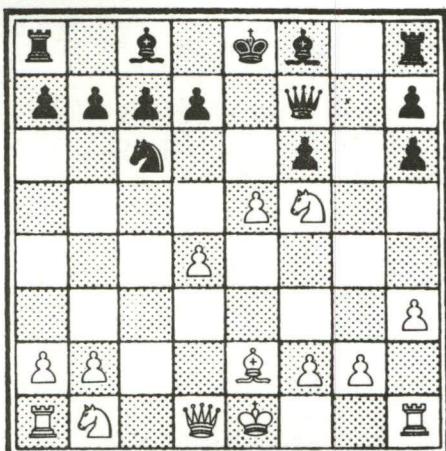
Diagram 15

This position was from a game Conchess versus Basman; Basman had just moved ...h5 with the obvious threat of ...h4 trapping the bishop. The natural reply is Ph3, but Conchess ignores the danger and plays 2e5 h4 3 Bxg6 Fxg6 losing a piece. The problem in these situations is that the actual loss of the piece takes several ply (here 5 ply) after the initial move, which makes it hard for a myopic little machine to spot. Still, the other computers seem to be able to solve this problem adequately, so perhaps Conchess will in their next Cartridge.

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Mephisto programmers, too, might find food for thought in this example.

Diagram 16

White has just played 11 Be2 threatening 12 Bh5 pinning and winning the black queen. Mephisto thought for _7 minutes_ here and managed to come up with the move 12...d5??? One wonders what sort of programming could produce a decision like that.

In general though, tactics are regarded as a computer's strongest point, and we have numerous examples of all the machines producing fine tactical ideas throughout the tournament.

In regard to ATTACKING THE KING the computers are less successful. The tactics involved are often less clear cut, they may involve sacrifice of material without immediate recovery, and this makes them harder to handle for a concrete analyst.

One feature that all the programmes could do with is to remember not to exchange the queens while you are attacking. Conchess, Mephisto and Sensory 9 all allowed this to happen and of course that reduces the value of your opponents king exposure to almost nothing straight away.
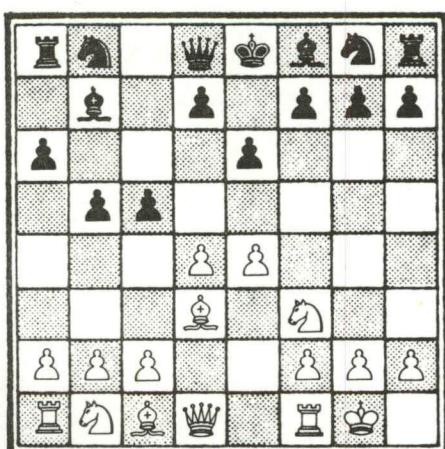
Computers will also frequently underestimate the danger to their own king, and this is often exploited by human opponents who cheerfully give away material to the computer and then flatten him with a mating attack.

POSITIONAL ASSESSMENT

In opening play the general principles cover development of the pieces, control of the centre, safety of king. Earlier computers would make elementary errors in attacking too soon, especially with their queens. Improved machines developed pieces but neglected pawn control of the centre and as a result the pieces became exposed. Morphy still has the residuals of this type of play, his main difficulty being to bring out his queen. The other machines seem to play on sounder lines, and it is a question of degree of error. A computer will always be tempted to put a piece offside to make an attack and the penalty for this sort of thing can eventually be loss of the exposed piece (see game Scisys - Sensory).

A typical example of lack of centre control might arise like this. 1 e4 e6 2 d4 a6 3 Nf3 b5 4 Bd3 Bb7 5 0-0 c5

Diagram 17

In these positions a computer will usually capture at c5 rather than maintain the central pawn with 6 c3. The capture is not an error but does make the task of the defender easier as his pieces are less vulnerable near the centre than before.
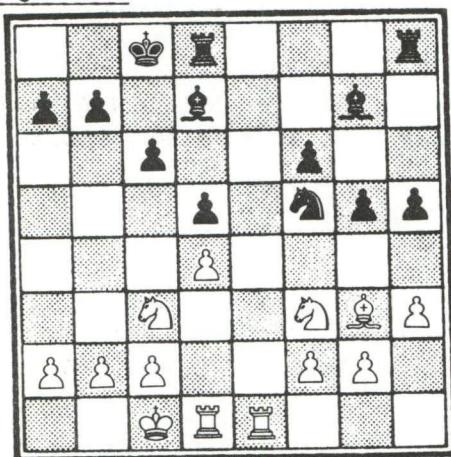
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In considering opening play, the amount of book knowledge a machine has is not that important; what one needs to know is what the machine would do left to its own devices. Having an opening 'book' however, at least ensures that the computer starts off with a reasonable position if the opponent plays regular lines.

In the case of king safety, Morphy lagged behind the other machines in failing to castle early and often fell under heavy attack right from the opening. In games against computers, castling is an advantage, because the computers are not very skilled at building up attacks against the castled king. However, playing against humans the very rigidity of this 'programmed response'of castling will often mean that the computer 'castles into it'.

In opening play computers will have difficulty in assigning material values to positional factors. It quite often occurs that one of the major factors - development, central control or king safety - will be worth more than a pawn. But the computer will nearly always plump for the pawn rather than the positional factor.

When the middle game is under way the computer is frequently hampered by the points system it gives to the pieces. A computer will give a knight 3 points, rook 5 and so on, but will not be able to assess that in certain positions a knight could be of value say, 2.7 points or rise to 3.5. The value of a piece is constantly shifting throughout the game depending on how near it is to the centre, whether it exercises real pressure on the opponent, how hampered it is or otherwise by the pawn structure, what are its possibilities for its advancing and so on.
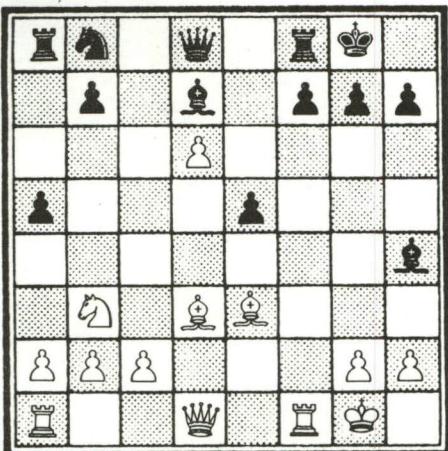
Diagram 18

Take this situation; here the knight at c3 is developed well, and placed near the centre. Presumably it is worth its full value of 3 points. But looking at the pawn structure shows that it is severely limited by the presence of black pawns at c6 and d5, which means that this value is over-rated. It is probably only worth 2.7 here. It would be wise for white to think of ways to grad-ually redeploy it, but a computer would probably leave it where it is in it apparently well posted position.

The short comings of computer positional assessment comes out nowhere more clearly than in their approach to the exchange of pieces. Basing exchanges on fixed values they will assume that no one gains and no one loses from say an exchange of pawns or bishops. But exchanges can alter the position in several ways. First there may be an exchange of a better placed piece for a worse placed piece; then the exchange may bring an enemy piece into a better position; there may be a change of pawn structure due to an exchange which will open a line, give the opponent more pawn control of the centre, or result in the creation of weak pawns or weak squares. All these factors will come into account during an exchange and most of them will be ignored by the computers.
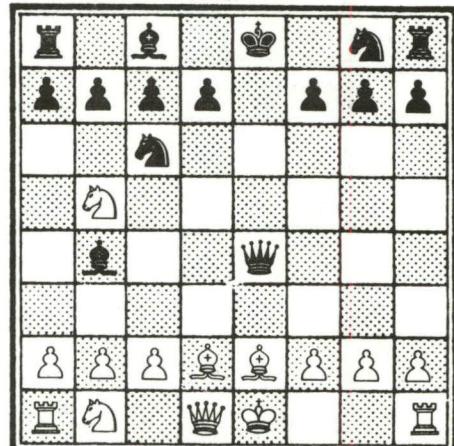
Diagram 19

Conchess v Sensory

Here Sensory played Bg5 and Conchess captured the bishop. This exchange brought the black queen into a stronger position. It would have been better to play 16Qd2 when after 16...Bxe3 17 Qxe3 it would be the white queen that was more dominant.
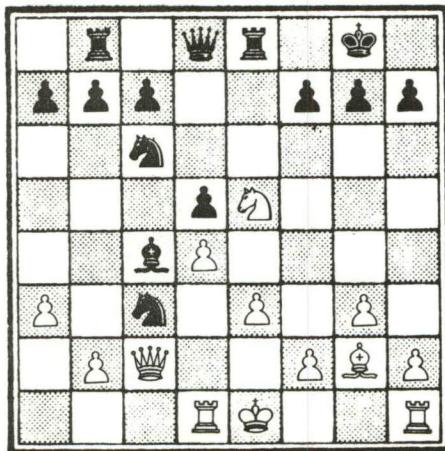
Diagram 20

Conchess v Mephisto

After 7 Bd2 Mephisto simply swapped bishops, which is faulty as after 8 Nxd2, the white knight comes into the game with gain of tempo. Better would have been to delay the capture at d2 rather than develop the opponent's pieces.
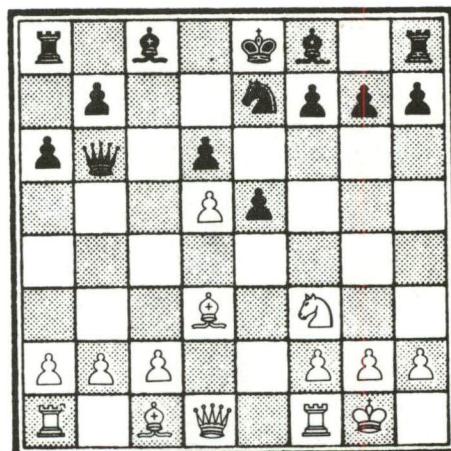
Diagram 21

Morphy v Conchess

Black has just played 16...Nxc3, and instead of recapturing Morphy played the in between capture 16 Nxc6?? This exchange opened up the b file for the usage of the black rooks.

Diagram 22

Conchess v Morphy
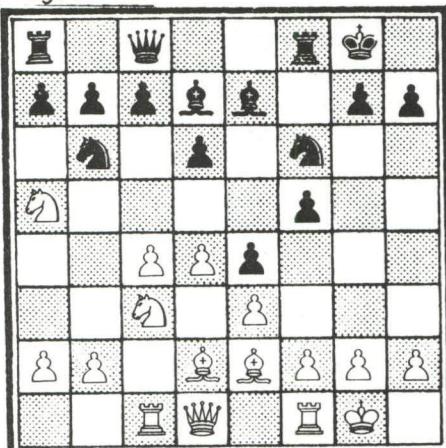

Here one would expect the move 11 c4 to maintain the central pawn at d5. Instead Conchess plays 11 h3, which is not a material error, since after 11... Nxd5 12 Bxa6 Nc3 13 bxc3 Rxa6 white has regained his pawn through tactical methods. However, there has been a wholesale exchange of positional units; white has lost a centre for a side pawn and a bishop for a knight in a fairly open position.

In general, Sensory 9 seemed to make fewer errors of exchanging pieces because of its aggressive policy; it always seemed to be seeking a way to provide better posts for its pieces, more advanced, more threatening. One of its peculiarities, however, was to play the move Bh5.

Diagram 23

This is from the Sensory - Scisys. White played 13 Bh5 here. This apparently increases the scope of the bishop but in fact it places it in an exposed position and also reduces the mobility of the white queen, which is now tied to the defence of the bishop.

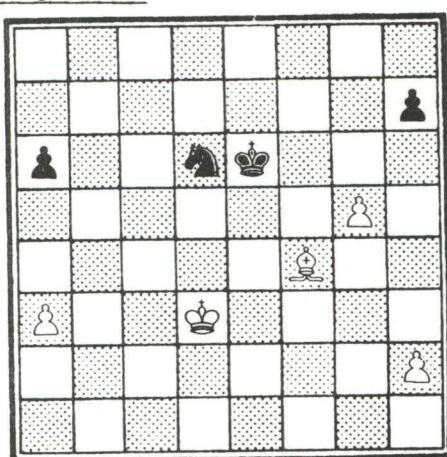Sensory played a Bh5 in a similar way against the Conchess.

ENDGAME PLAY

In the endgame the value of the pawns increases and the need to advance pawns to queen becomes a prime target. The level of danger to the king decreases and he can be used more energetically. None of the machines appreciated these factors sufficiently well, though they did not ignore them completely. Sensory 9 was ready to use its king in the ending, and ready to push passed pawns, but not always ready to do both at once - i.e. advance the pawns with the help of the king. Mephisto was slow to use its king as was Morphy and Morphy's disregard for the passed pawn was chronic. I tried out specimen endings on the Conchess and though it did not perform brilliantly it seemed superior to Sensory 9.

The most telling errors in this section came in the conduct of exchanges - exchanges again! We've seen that in attacking play the computers ruin their chances by exchanging queens; how in positional play they pass over bunkers of positional points with bad exchanges and now in the endgame they throw away games by allowing simplification into winning king and pawn endings. Here is Mephisto about to lose against Sensory 9.

Diagram 24

Mephisto must move his knight away and use it to keep the white pawns at bay, but instead he plays ...Kd5, clearly thinking that Sensory will not exchange (because Mephisto rates bishops higher than knights anyway). Sensory does exchange and the king and pawn ending is an easy win.

This sort of problem could easily be circumvented if the machine had a routine in it to check whether the exchange led to a king and pawn ending and only allow it if it was a pawn up; even equal material king and pawn endings have to be treated with care ; they are generally a forced win for one side or the other.

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Endgames frequently arise in computer v computer games, so it would be worthwhile the programmers taking some trouble over them. In this tournament more than half the games went to the endgame, and the decision was frequently reached there.

LAST WORDS

If a subroutine could be written to warn the computer of an imminent king and pawn ending, another one could be equally useful in the middle game, when the possibility of a queen exchange might arise. In those cases the computer would need to ask if whether it was forfeiting attacking chances by checking the level of exposure of the enemy king, or conversely whether an exchange of queens might help to relieve the pressure upon his own king.

With the other forms of exchange, discussed in the section on positional play, the problems are far more delicate, and we may have to wait a long time for a computer that can weigh up these subtle transactions with the touch of a grand master.

The full scores of the 20 games played in this tournament can be obtained from Audio Chess for £1 post free.

rabbits review

was extinguished at issue No. 21, but the back issues still provide a gold mine of instruction for the amateur player.

Here are some of the highlights of Nos. 13 - 21:-

13: Computaworld; Morphy and Sargon reviewed; letters; Postal chess; a rabbits life.

14: Razor sharp play in the Samisch King's Indian; book reviews;diary of a weekend congresser.

15: Ian Josephs on the King's Indian Attack; endgame play; Classical King's Indian.

16: Golden rules of Ian Josephs; 3 levels of chess (Basman).

17: Rabbit v Grandmaster (Josephs); Assessing Quality (Basman); Positional study.

18: Positional values (Basman); letters; a christmas story; Ian Wells.

19: Pearls before rabbits and the tale of the abominable Frenchman (Josephs); Postal play; attacking the uncastled king.

20: digging up grandpa; advanced analysis; a Rabbit in Guernsey; exchange of ideas.

21: countdown clocks; tactical quiz; Don't trust the books(Josephs); Minor pieces; the interest; a Grob at the club.
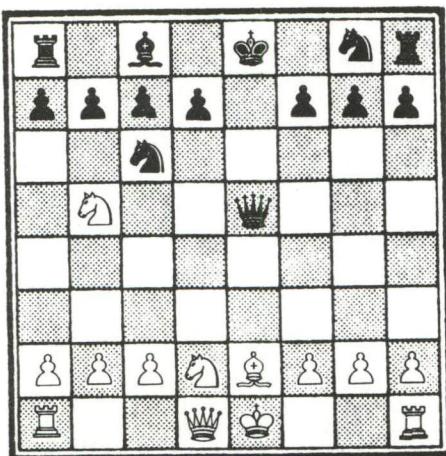
All these issues are available at 90p each post free from Audio Chess, 7 Billockby Close, Chessington, Surrey, Kt9 2ED. Issues 1-12 can be obtained at 70p each. Make cheques payable to Audio Chess.

Byron Jacobs, approximate grade 210, British Championship contender, offers personal tuition by cassette. Write to him at 25, Williams Street, Windsor, Berks. Cost of lessons; £5 (two games); please supply blank cassette.
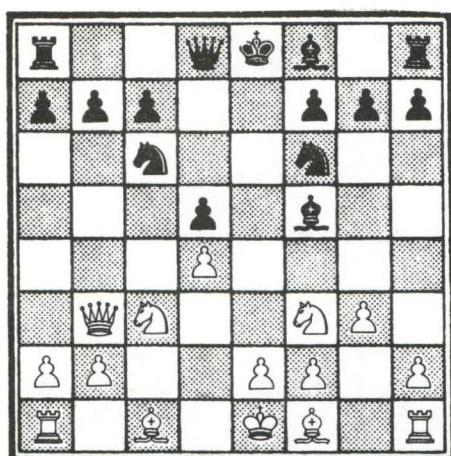
HOW WOULD YOU DO?

Here are several positions which arose in the computer championships for you to try your wits out on.   Many of them are tactical situations, others pose common problems of endgame play. Try to solve them and then turn to the answers on page 26 , which will not only be helpful for estimating your own playing skill, but also give your further insights into the way computers play.

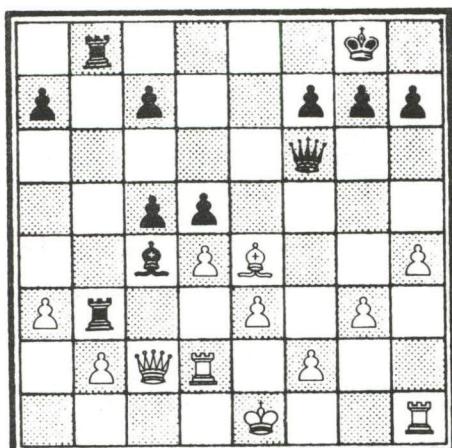1. Conchess v Mephisto

White to play

2. Morphy v Conchess

Black to play

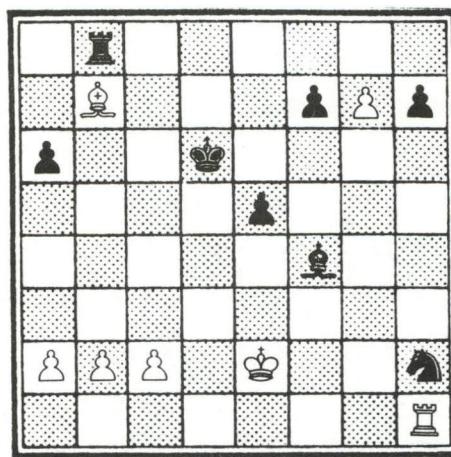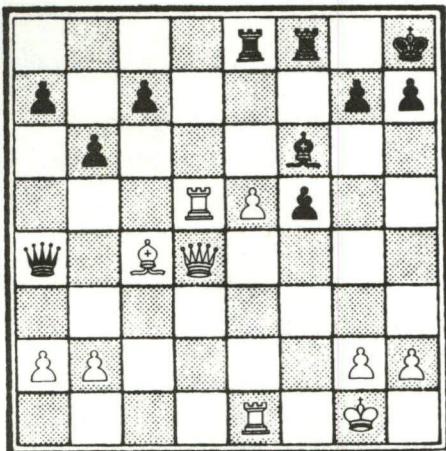3. Morphy v Conchess

Black to play; what is his best line?

4. Morphy v Sensory 9
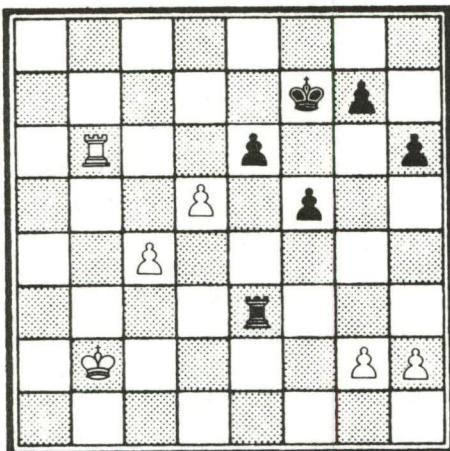
White to play; a piece down, can he save the game?

16

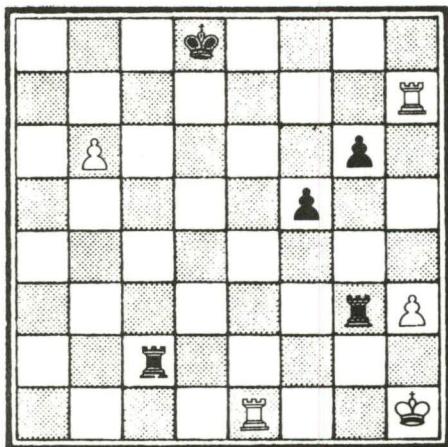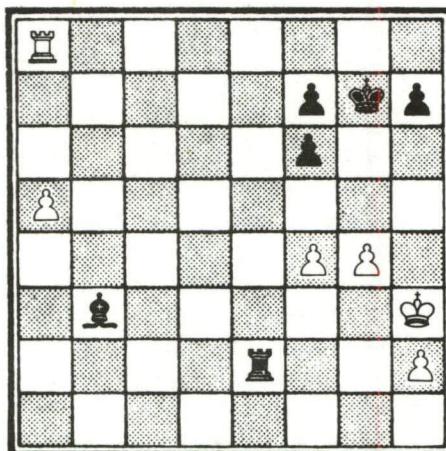## 5. Morphy v Scisys

White to play.

6. Scisys v Morphy

Black to play.

7. Morphy v Mephisto

White to play.

8. Conchess v Mephisto

Black to play.

9. Scisys v Sensory 9

Black to play.

10. Conchess v Mephisto

Black to play.

17

WHICH COMPUTER?

Many of our readers already own a computer, or are thinking of buying one. This issue has concentrated mainly on assessing the strength of the computers on offer, but other factors will also come into consideration. As a personal opinion, the Sensory 9 would be the best buy for strength; it is also the cheapest, but has the disadvantage of not being upgradeable. For portability and versatility (it fits in your jacket pocket; has its own rechargeable batteries) the Mephisto is best buy. It is also upgradeable. For appearance and ease of usage I choose Conchess Ambassador. This is because it looks like a normal chess set and the pieces can be moved in the normal manner. With other sensory boards, for example the Sensory 9, you have to press down on the square; with the Conchess magnets underneath the board register to movement of the pieces. Conchess is also upgradeable.

I am not sure why I would want to choose the Scisys. It has an original way of playing which reminds me of Raymond Keene and it also has a mound of special featrues such as the ability to play twelve games at once. It is the only machine with an LED chess board built in, though I was not impressed with this; the knights are barely distinguishable from the bishops.

The Morphy does not seem to be a good buy for several reasons, though strength is not one of them. In the first place its design may have been great in 1981, but not today. It heats up considerably compared to the other computers. Secondly, there is a small but significant defect in that you are not able to key in a few moves - say of an opening line you want to try out - and then start playing from there. You can do this with all the other computers, but with Morphy you have to set up the position rank by rank. No doubt the upgraded Morphy now available - called the Steinitz - has this feature, but then we cometo the crux of the problem. The new Steinitz cartridge costs £179 which is double what anyone should expect to pay for updating his computer. Perhaps the Steinitz will descend in price in a few months and then be worth forking out for. Meanwhile, I hear that Great Game Machines with the Morphy cartridge are being sold off at the Chess Centre for £125, and at that price they are a bargain.

It is quite possible that you may not want to purchase any of these computers; they are after all around £200. But all the firms produce a large range of different machines, many at a considerably lower price. Of course, the lower the price the weaker the machine in most cases, but for beginners and novices a strong computer is not necessary. For these players the Acetronic (a division of Scisys) Electronic and Graduate Computers, costing between £20 - £25 are excellent value. Slightly higher up in price, but much stronger in strength, the new Computachess II from Fidelity seems good value. There is a mini-sensory version for £40 and a larger sensory version for £60.

THE FUTURE

The chess computer world is a more stable one that in the past; we can look forward to continual improvements from Fidelity, Mephisto and Scisys,closely followed by Conchess and Novag who are trying to break into the market. Applied Concepts, who make the Morphy and Steinitz, have never been the same since they lost their chief programmers, Dave and Kate Spracklan, to Fidelity in 1981.

Shortly coming from Fidelity is the Elite, which claims to have virtually the same programme as the £800 Prestige, a machine which is supposed to hit 160 grade or higher. The price of this new machine will also be rather tough at £369, a full £200 more than the Sensory 9.

Meanwhile Mephisto are sounding off with their new number III cartridge in September 1983. This is claimed (by the vendor, Competence) as tremendous advance on the Mephisto II and even to excel the Fidelity Elite in playing strength. Bear in mind though that according to Competence, Mephisto II left everyone else standing and there is considerable doubt about <u>that</u>.

We hope to be testing all these new machines in the future and my final word in this article is to thank all the makers of the micros for their pioneering work in bringing the new technologies into our households. Naturally, their main aim is to make a profit by the sale of these machines, but all the same, the financial risks involved must have been and still are, quite colossal.

<u>Where can you get them from?</u>

General stockists of chess computers will be most big department stores, e.g. Hamleys, Harrods, Selfridges, and the new video stores that are springing up.

For chess orientated general stockists, try The Chess Centre, 3 Harcourt St, London W.1. Telephone: 01-402-5393. The Games Centre in Oxford Street also has a good range.

The Mephisto range of computers is best obtained from Competence, 263A Eversholt Street, London N.W.1. 1BA Telephone: 01-380-0666.

British distributer for the Fidelity range (e.g. Sensory 9) are C.G.L., C.G.L. House, Goldings Hill, Loughton, Essex. Telephone: 01-508-5600

Conchess are marketed by C.C.C. 2-3 Noble Corner, Great West Road, Hounslow, Middx TW5 0PA   Telephone: 01-577-1700

Morphy/Steinitz are distributed by Studio Anne Carlton, 112/114 Flinton Street, Hessle Road, Hull HU3 4BN.

Scisys head office is ACE Ltd., 3 Fulton Road, Wembley.

All these last four names will give you information about their range of computers, and can put you in touch with a local stockist .
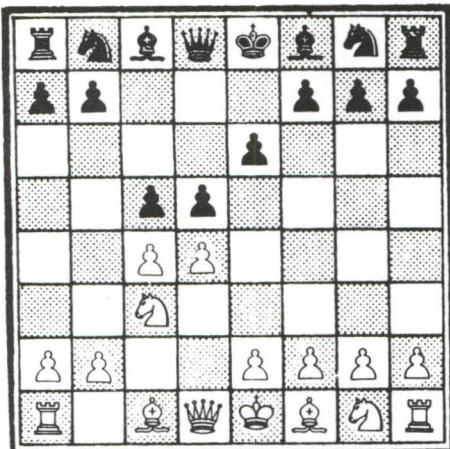
19

STAR GAMES

White: Mephisto II Level 6
Black: Conchess Level T5

Opening - Queens Gambit Declined,
          Tarrasch Defence.

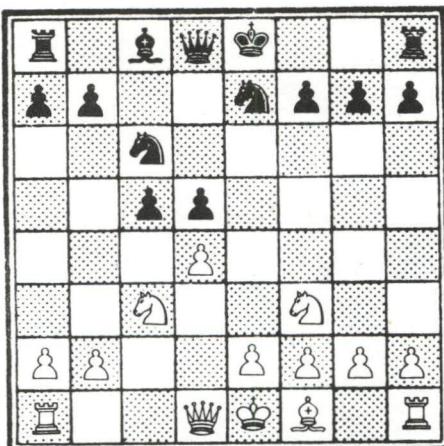   1 d4   d5
    2 c4   e6
    3 Nc3   c5

For a long time I did not understand why
people advanced pawns into the centre
until I realised that it was because the
pawns were the only pieces that could
feel safe there. A later exchange of
central pawns means automatically that
the stronger pieces can then enter the
centre. Of course the advance and
exchange of central pawns also opens
file and diagonals and thus helps to
release the pieces.

    4 cxd5   exd5
    5 Nf3   Nc6
    6 Bg5

White is bringing out his queenside
pieces but there is a real danger he
may not get round to castling in time

    6 ...   Be7!
    7 Bxe7   Nge7
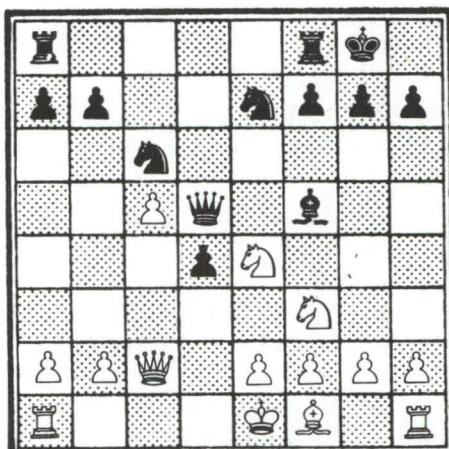
This whole sequence of moves starting
Bg5 has been faulty, as the exchange only
helps black to develop. It is true that
white can now win the 'c' pawn, but this
is won at the expense of two of the
major positional factors in the opening
- king safety and central control.

    8 dxc5?   d4!
    9 Ne4   0-0
   10 Qd2?

A rather oblivious move in view of
black's next. However, it is hard to
suggest an alternative that doesn't
involve giving the ill-gotten c pawn
back. In fact something like 10g3 Qd5
11 Ned2 Qxc5 12 Bg2 looks best as white
will at least be able to castle.

   10 ...   Qd5!
   11 Qc2?   Bf5!

Now white is really in a strait   jacket.
He's done all he can to preserve his
extra pawn at tremendous positional cost,
and as it turns out he cannot even
retain the pawn.

   12 Nf3d2   Nb4
   13 Qb1   Na6!

This is probably best, as it regains
the pawn by force but keeps the attack
going.

   14 b4   Nxb4

A smart little combination which takes
advantage of a queen over burdened with
duties.

```
15 Qxb4      Bxe4
16 Nxe4      Qxe4
17 e3
```
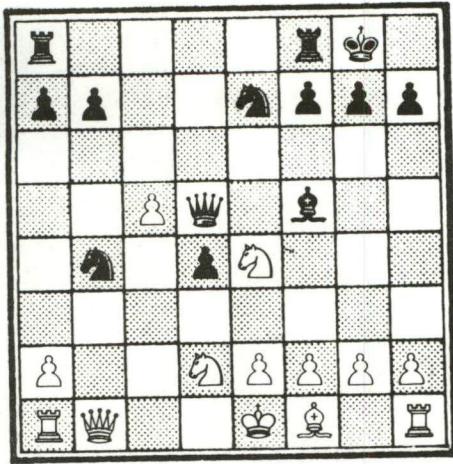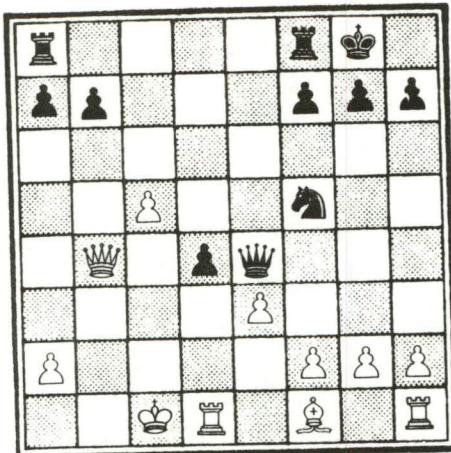
White tries now to exploit a pin
of his own.

```
17 ...       Nf5
18 0-0-0!?
```


The white king is bereft of shelter,
white lags in development and his control
of the centre is inferior. Nonetheless,
Mephisto's last move is a good try,
because it threatens to break for
freedom with 19 Bd3 followed by 20 Bxf5
and then a capture at d4. Conchess needs
to play very sharply to keep the
initiative.

```
18 ...       a5!
19 Qa4
```

The queen must stay pinning the pawn at
d4, otherwise black will break through
with dxe3.
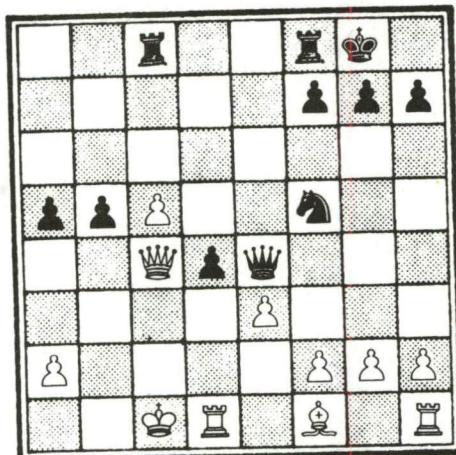
```
19...        Rac8!
```

Another nice tactical move, white
cannot win a pawn with 20 exd4 because
of the answer 20 ... Rxc5 ch!

```
20 Qc4
```

The sixth move of the queen, and all
to guard that measly pawn at c5.

```
20 ....       b5!
```


The decisive line opening move. Retreating
with the queen to c2 is not really satis-
factory now after 22...Qe5, but nor is
the move chosen.

```
21 Qxb5      dxe3
```

Now the pin is broken this capture is
possible. 22 ...Rb8 also looked strong
but would be met by 23 Qd3 blocking the
check on b1.

```
22 fxe3      Qxe3+
23 Kb1       Rb8
```

This wins the white queen for only a
rook.

```
24 Rc1       Qe4+
25 Ka1       Qd4+
26 Kb1       Rxb5+
27 Bxb5      Rb8
```

and now the bishop goes as 28 a4 would
be met by 28... Qxa4

```
28 Rce1
```


21

Black now has a mate in four - can you locate it? Answer at the bottom of page.

Mephisto's loss can be traced to valuing material over positional factors; this is particularly dangerous when you play white in a queenside opening, as castling takes that much longer. In many games when Morphy opened with a queen pawn he got into similar difficulty due to loss of time with his queenside pieces.

****

White: Sensory 9
Black: Mephisto
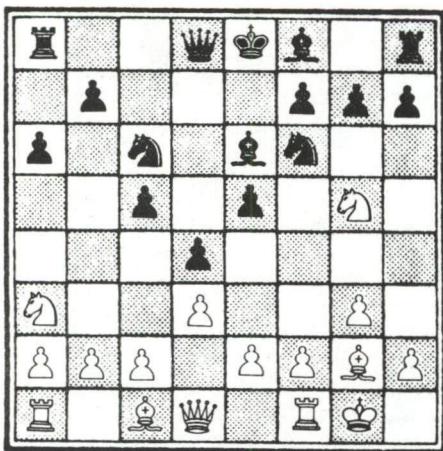
Opening: King's Indian Attack
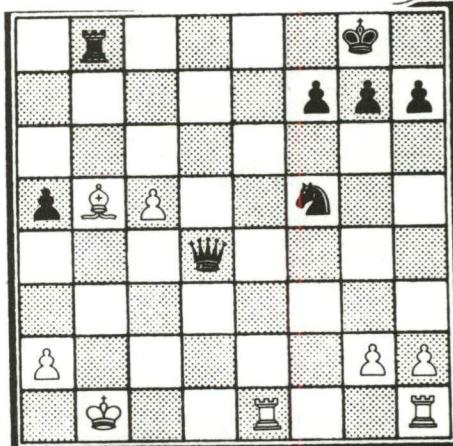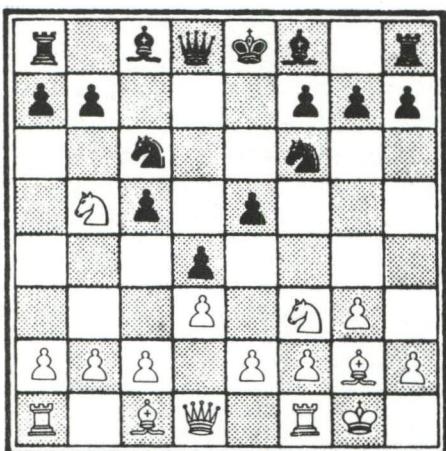
```
1 Nf3      Nf6
2 g3       c5
3 Bg2      d5
4 0-0      Nc6
5 d3       e5
6 Nc3      d4
7 Nb5
```


The white knight has been driven to the edge, but he intends to come round to c4 via a3. Meanwhile, black's imposing centre lacks mobility with all the pawns fixed on dark squares.

```
7 ...      a6?
8 Na3      Be6?
9 Ng5
```
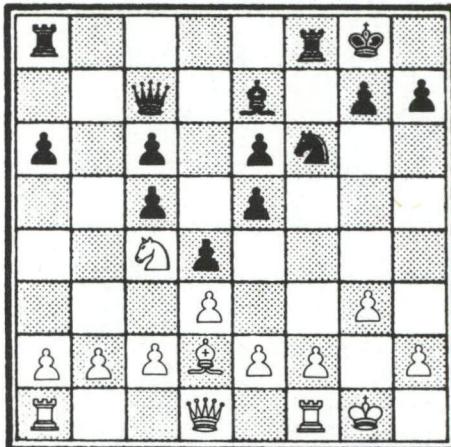

Now the other knight comes into harrass the bishop at e6. Since this was black's better bishop he should have made some efforts to retain it or at least exchange it for the bishop at g2 by playing 9... Bd5

```
9 ...      Be7
10 Nxe6    fxe6
11 Nc4
```

The knight returns to the centre, occupying a nice outpost and threatening the win of a pawn. Sensory has run rings round Mephisto in this opening phase.

```
11 ...     Qc7
12 Bd2     0-0
13 Bxc6    bxc6
```
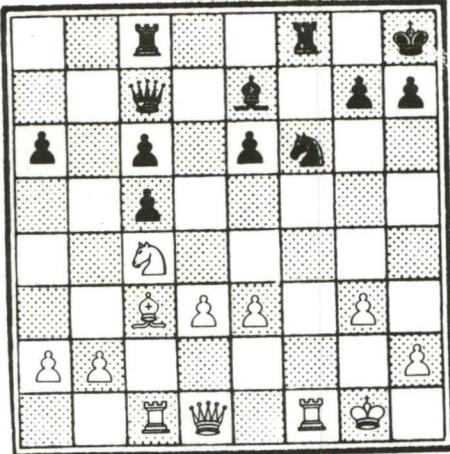

White holds some advantage here due to the two sets of doubled black pawns and the locked in bishop at e7; however, in the next few moves black makes up a little ground by eliminating one of his weak pawns.

```
14 e4      dxe3
15 fxe3    e4
16 Bc3     exd3
17 cxd3    Rac8
```

Black would prefer to play 17... Rad8 here, but this is skewered by 18 Ba5, so he takes a more passive position.

```
18 Rc1     Kh8
```

Black mates by 1...Rxb5ch 2 Kc1 Qc3ch 3 Kd1 Qd3ch 4 Kc1 Rb1 mate.
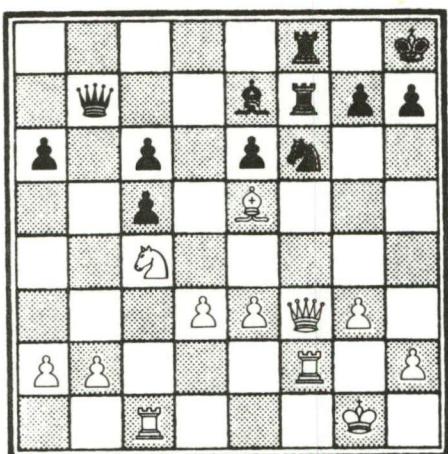
White now needs to bring his queen into the game to really underline his advantage, but the natural moves 19 Qg4 and Qh5 fail to NxQ. It would be nice to get the queen around to h3 say, for example by 19 Qe2-g2-h3. There are other plans in this position, but Sensory makes a few disjointed manoeuvres and starts to tangle himself up.

```
19 Be5        Qb7
20 Qf3
```

This begins to look suspicious placing his queen opposite a rook.

```
20 ...        Rf7
21 Rf2        Rcf8
```
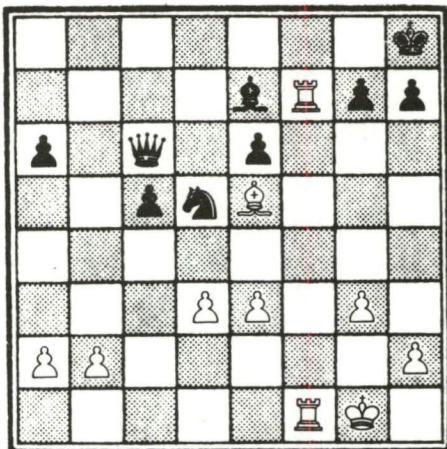

The scene is set for a showdown which will not be as much in Sensory's favour as it shoud have been. In fact a few consolidating moves would have been in order here, for example, 22 Rcfl. But Sensory, impatient to score, goes for the pawn at c6.

```
22 Na5?!      Qb5!
23 Nxc6       Nd5!
```

A fine resource which exploits the exposed white queen at f3 and strands the knight at c6. Now Sensory has no choice but to give up queen and knight for two rooks; a bad deal, except that the attacking chances Sensory obtains throw the whole game into the melting pot.

```
24 Qxf7!      Rxf7
25 Rxf7       Qxc6
26 Rcf1
```


White's meagre attacking force of two rooks and a bishop threatens mate in two by 27 Rf8+ Bxf8 28 Rxf8.

```
26 ...         Qe8
```
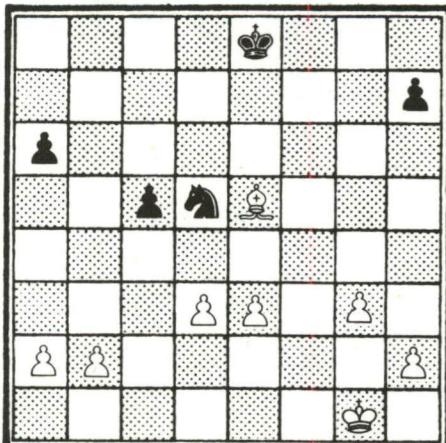
This natural defence is not sufficient. What about 26... h6 instead? Could white still have proven a win in this case?

Send your analysis to Popular Chess and the best effort will win the set of Turnover Books on Tactics.

```
27 Rxg7!      Bf6
28 Rxf6!!     Kxg7
```

Black has to play this as if he accepts the sacrifice by 28 ... Nxf6 29 Bxf6 Qf8 30 Rg6+ Qxf6 31 Rxf6 he comes out a whole rook down.

```
29 Rxe6       Kf7
   dis.ch
30 Rxe8       Kxe8
```

A clear three pawns down in the ending
I was tempted to resign for Mephisto, but
something told me not to trust the Sensory
9 too much. For a start he has to solve
the little problem of his 'e' pawn being
en prise, and if he moves it with 31 e4
then there is a knight fork at b4 to be
considered.
      31 d4?
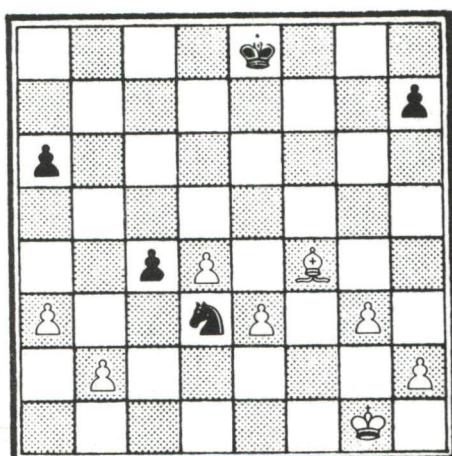
Sensory's first mistake, which shuts his
bishop out from the queen side and gives
Mephisto a potential passed pawn. There
were as least two better moves - the simple
31 Bd6, exchanging the 'c' and 'e' pawns,
and the more subtle 31 Kf2 Nb4 32 Ke2!
the point being that if black captures on
a2 then 33 Bc3 traps the knight which can
now only free itself by exchanging into a
lost king and pawn ending. 31 Kf2 would
have been good in a general sense, as it
activates the king. Sensory doesn't bother
to move it until move 43...
      31 ...   c4
      32 Bf4?
Sensory might have been tempted to use his
king here, but perhaps noticed that
32 Kf2 would be answered by 32 ...Nb4
33 a3 Nd3+ 34 Ke2 Nxb2

      32 ...   Nb4!
      33 a3   Nd3!
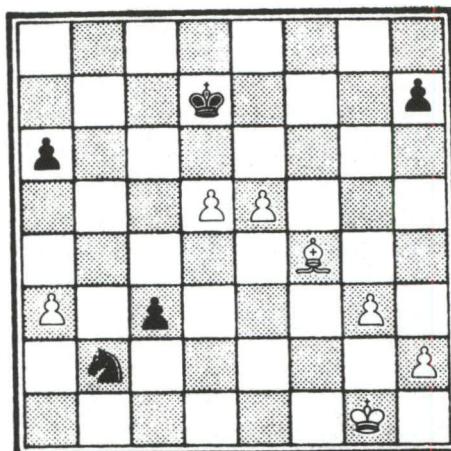
Now black has real counter play as he
obtains a passed pawn of his own. White's
best choice is still to bring his king
over to waylay the pawn, and the ending
must be won. For example 34 Kf1 Nxb2
35 Ke2 c3 36 d5 and white should be able to
swap his 'a' pawn for the black c pawn.
      34 e4?

White starts to play with fire, hoping
that his own passed pawns will be a
queening threat. However, though the
pawns are connected the black king in
front of them is a most efficient blockader
      34 ...   Kd7
      35 d5   Nxb2
      36 e5   c3

The white pawns have gone as far as
they can hope to, and white should have
left them at e5 and d5 where they keep
the black king at bay.

      37 e6+?   Ke7
      38 Bg5+   Kd6
      39 e7   Kd7

The white pawns have now run aground
and are vulnerable to capture.

      40 Bf6?   Nd1!
      41 d6?   c2
      42 Bg5   Nb2
      43 Kf2
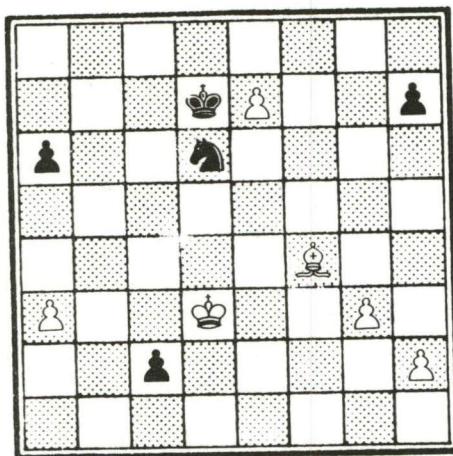
What a change has come over the position
since the end game began!

Sensory's inept play, based on his refusal to use his king, has meant that black is now in a position to win a piece by 43 Nd3+ 44 Kf3 c1=Q 45 Bxc1 Nxc1. This would lead to an ending of three pawns against a piece, which originally I thought was good for black, as his king and knight should be able to quite easily take care of the white pawns at d6 and e7. However, it is not as simple as this, and if white rapidly advances his king up the board the position might still be quite hard to save for black.

        43 ...   Nc4 !

Probably the correct decision, though with best play white should keep the advantage   . The king finally finds the right path, when all other avenues have been exhausted.

        44 Ke2   Nxd6 ?
        45 Kd3   Nf7
        46 Bf4   Nd6??

The first signs of incomprehension. Mephisto could simply have captured the e pawn last move, when the ending is bad (white has an extra pawn, and the fact that there are pawns on both sides of the board favours the bishop), but not hopeless.
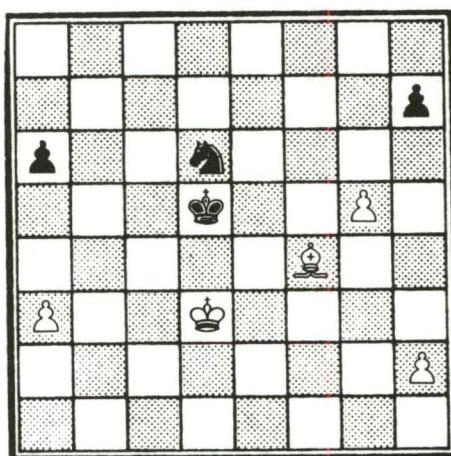
        47 g4??

Sensory also does not know the maxim 'king and pawn endings are always won', otherwise he would have played 47 Kxc2 Kxe7? 48 Bxd6 ch etc.

        47 ...   C1 = Q!
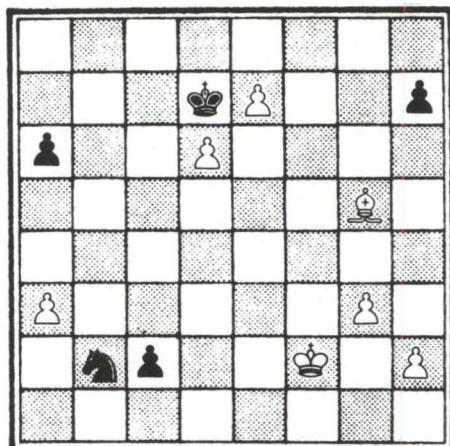   48 Bxc1   Kxe7
        49 g5?

Very bad to place this pawn on the same colour square as the bishop, for that makes it easier for black to blockade the white squares. 49 a4 (putting another pawn on a white square) was far better.

        49 ...   Ke6
        50 Bf4   Kd5???

After this there were no more blunders. Sensory now won easily with

        51 Bxd6   Kxd6
        52 Ke4   Kc5
        53 Kf5   Kd4
        54 h4   Kc4
        55 h5   Kb3
        56 g6   hxg6
        57 hxg6   Kxa3
        58 g7   a5
        59 g8 = Q   Kb4
        60 Qb8+   Kc5
        61 Qe5+   Kb4
        62 Qd4+   Kb5
        63 Qb2+   Kc5
        64 Qc3+   Kb5
        65 Qb3+   Kc5
        66 Qa4   Kd5

                           1 - 0

A game which graphically reveals the strengths and weaknesses of the modern micros.

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SOLUTIONS TO HOW WOULD YOU DO?

Position 1:   Conchess v Mephisto. Black's queen was uncomfortably tied to the defence of the c7 pawn and Conchess tried to dislodge her by 1 Nf3 Qf4. Here further harrassment does not achieve its object, since 2 g3 Qb4+ 3 c3 Qa5 sees black still defending c7. 2 0-0 looks strong, after which black would have to play 2...Kd8 if he wanted to save his pawn at c7 (white does now threaten 3g3).

Instead, Conchess blew all his attacking chances by playing 2 Qd2, exchanging queens into an ending a pawn down.

The position was offered to Mephisto, who chose the very strong 1 Nc4! This virtually wins the exchange by force, as 1 ... Qxb5 is answered by 2 Nd6+; and 1 ...Qf4 2 g3 leaves the black queen without a saving check at b4.

Mephisto was also tested on the position after 1 Nf3 Qf4. It played the stronger 2 0-0 but later also allowed queens to be exchanged: 2 ... Kd8 3 g3 Qh6 4 Qd5 Qe6! 5 Qg5 Qf6 6 Qxf6+ .

Position 2:   Morphy v Conchess. Morphy has played a queen side opening, and as usual his king is dallying in the centre. His last move was 1 Qb3, a fatal waste of time which should be answered by 1 ... Nb4. Conchess instead played the positional move 1 ... Bb4, either because it did not realise that 1 ...Nb4 was strong or because its opening ideas told it not to move a piece twice in the opening. Set to Mephisto, the continuation chosen was:
1 ...Nb4 2 Kd2 Be7 3 Bg2 Ne4 4 Nxe4 dxe4 5 Nh4 Qxd4+ 6 Kel Qc5 with advantage to black.

Sensory 9 chose 1...Nb4 2 Kd2 Bc2 3 Qa3 c6 4 Bg2 Na6! 5 b4 Bxb4 6 Qb2 with a tremendous attacking position.

Position 3:   Morphy v Conchess. This is the same game a little further on. Morphy's position has worsened grievously with his king trapped in the centre. His last move, however, 1 Bg2-e4, is an interesting attempt to muddy the waters, since if the bishop is captured by 1...dxe4, white can answer 2 Qxc4 and be ready to castle. Furthermore, if black wins the queen for two rooks by 1...Rxb2 2 Qxb2 Rxb2 3 Rxb2, he cannot pick up the bishop at e4 because of the back rank mate threat. I get the feeling that best play from the diagram was 1...h5 coping with the back rank mate threat and deferring the action till the next move.

Conchess chose 1...d5xe4 and even got the worst of it after 2 Qxc4 Rxb2 3 Rxb2 Rxb2 4 0-0! cxd4 5 Qxc7 h6 6 Qxa7 d3! 7 Qa8+ Kh7 8 Qxe4+.

Mephisto was set   this position and chose 1...dxe4 as well, with much the same continuation ensuing.

Sensory 9 went for the win of the queen by 1 ...Rxb2 2 Qxb2 Rxb2 3 Rxb2 and now defended its back rank in a most cumbersome way - 3...Qd8? 4 Bf3 Qf8? 5 Be2! after which white again had escaped. It is unlikely that the white king could have survived if the natural 3...g6 4 h5 h6 had been played.

Position 4:   Morphy v Sensory 9. This was a difficult tactical problem which none of the machines, not even Sensory 9, was able to match up to. White is a piece to the bad, but there are chances to win the trapped knight at h2 before the pawn at g7 is rounded up.

Best was 1 Be4 Rg8 (otherwise white wins by 2 Bxh7) 2 Rg1!
This guards the g pawn and threatens 3 Bxh7 again. Black has no choice but to play
2...Bh6 after which white regains his piece by 3 Rg2.

Computer choices were:

Morphy: 1 Bxa6 Rg8 2 Rg1 Ke6 3 Bd3 Kf6! 4 Bxh7 Rxg7.

Mephisto: 1 b4 Rg8 2 Rg1 h5

Sensory 9: - Bxa6 Rg8 2 Rg1 h5 3 a4 Ng4

Position 5:   Morphy v Scisys. An example of Scisys pushing the opponent
over the edge of his ply search horizon. The correct move was 1 exf6! Rxe1+
2 Kf2 when black has to lose at least a piece.

         Both Morphy and Mephisto missed this continuation. Sensory 9 saw
it quite quickly - even on level 3 (average 30 seconds a move). Conchess took
15 minutes to find 1 exf6.

Position 6:   Scisys v Morphy. This was another teaser. Though Morphy eventually
won this game, he could have embroiled the white king in a mating net starting
1 ... Bxd5! 2 Rd8 Re3+ 3 Kh4 Bg2! This is the key move threatening 4...Rh3 mate
and if white tries to escape with 3 g5 f5 4 g6 h6 he still cannot do so.
Morphy tried this idea a move later, when it didn't quite work. He played
1...Be6? 2 f5? Bd5 3 Ra7? Re3+ 4 Kh4 Bg2? (4...h6 was better) 5 g5 when white
was losing but not getting mated.

         None of the machines found the winning line.

Position 7:   Morphy v Mephisto. The best Morphy could do here was to repeat
moves by 1 Rb7+ Kf6 2 Rb6 Kf7 after which Mephisto eventually claimed a draw by
repetition.
         The best move was 1 d6 followed by 2 c5, when the connected
passed pawns are overwhelmingly strong.

         However, not one of the machines chose this line, probably because
they feared losing the g pawn to the follow up 1... Re2+.

         Methisto and Conchess went into a drawn king and pawn ending (which
Conchess played a little better) by 1 dxe6 Rxe6 2 Rxe6 Kxe6.

         Sensory chose the remarkably bad 1 Ka2? which loses a pawn to
1 ...exd5 2 cxd5 Rd2 3 d6 Ke6 4 d7+ Ke7 5 Rg6 Kf7 .

         No marks for end game play here.

Position 8:   Conchess v Mephiso. To retain drawing chances in this ending the
rooks need to be kept on; the king and pawn ending a pawn to the bad must be
a loss.

Conchess, Mephisto and Sensory 9 all exchanged the rooks.

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Position 9:   Scisys v Sensory 9. This was the end of a long battle, with Sensory having fought its way back into the game and now being able to secure a draw by continuing 1...Rg3-g2. This sets up a two rook battery on the seventh rank which should give perpetual check.

Instead Sensory 1...Rc2-c3? and after 2 Kh2 Rg3 e3 3 Rxe3 Rxe3 4 Rb8+ Kd7 5 b7 the pawn went through to queen.

Position 10: Conchess v Mephisto. This tests your appreciation of potential passed pawns. Mephisto played 1 ...Kb5 and Conchess immediately secured a passed pawn by 2 g4 hxg4 3 h5, a pawn which the black king was too far away to catch.

Sensory as black chose 1 ...f6-f5, to prevent the threatened g2-g4. Mephisto as white after 1...Ka6-b5 did not find the moves 2 g2-g4 indicating that it did not see the potential passed pawn.

If you are planning a repertoire for the new season, you will usually need three systems, one defence for black against 1 e4, one defence for black against 1 d4, plus one line for white. You may choose either standard or unusual lines, but you have to always consider the probability of your opponent playing into your variation: in this case the sooner your opening 'begins', the better.

We will make several suggestions for opening lines here, all of which are available on cassettes. Cassettes, which have limited room for material, are an excellent means of aquiring the basic information to begin playing a new line in the shortest possible time.

Repertoire I: as white you play 1d4; if your opponent answers 1...Nf6, you reply with the QB Attack (? Bg5). If he plays 1...d5, you continue with 2c4, the Queen's Gambit, discussed on Keene's repertoire tape part I; alternatively against 1...d5 you could try the Veresov (Plaskett).

As black you defend with the Benoni (Nunn) or Slav(defence to d4 tape by Basman), and play the Petroff or Centre Counter against 1 e4.

Repertoire II: Here you begin 1 e4 as white and play the 3 Be2 variation against the Sicilian; you play Bishops Opening against 1...e5, and the French Tarrasch against 1...e6.   As black against 1e4 you play the St. George. Against 1d4 you play the Polish (1...b5) or the English Defence (1...b6).

Repertoire III: As white you play 1e4 again, and reply with the King's Gambit to 1...e5, and the Sicilian Close against 1...c5. You use the Advance variation against the French.   Against 1d4 you reply with the Budapest, and use the 4...Bc5 Sicilian or the Caro Kann with 5...gxf6 against 1 e4.

There are many other repertoires you might sketch for yourself, and if your time for study is really limited, then 'universal' openings, which can be played as white, or black against 1e4 or 1d4 - such as the King's Fianchetto, St. George and Macho Grob openings are all worth playing.

A full catalogue of all these openings on tape is obtainable from Audio Chess, 7, Billockby Close, Chessington, Surrey, KT9 2ED. Tapes can be bought or hired.

1. Morphy Level 8 - Mephisto Level 6

1 d4 Nf6 2c4 e6 3 Nc3 Bb4 4 Qc2 c5 5a3 Qa5 6 Nf3 Nc6 7e3 cxd4 8exd4 0-0
9 Be3? d5 10 Be2 dxc4 11 Bxc4 b5 12 Bd3 Bxc3 13 bxc3 b4 14 Ne5 Nxe5 15 dxe5
b3 16 Qxb3 Qxe5 17 Qc2 h6 18 Rb1 Nd5 19 Kd2 Nxe3 20 fxe3 Rfd8 21 Rb4 f5 22 a4
Qc5 23 Qb1 Ba6 24 Rd4 Bxd3 25 Qxd3 Qb6 26 Qb5 Rxd4+ 27 exd4 Rc8 28 Qxb6 Qxb6 29 Rb1
Ra8 30 Ra1 Kf7 31 Ra3 Ra5 32 c4 Ke7 33 Kc3 Kf6 34 Rb3 Rxa4 35 Rxb6 Ra3+ 36 Kb2 Re3
37 d5 Kf7 38 Rb7+ Kf6 39 Rb6 Kf7 40 Rb7+ Kf6 Mephisto claimed a draw by repitition.

2. Mephisto Level 6 - Morphy Level 8

1 e4 e6 2 d4 d5 3 Nc3 Bb4 4 e5 c5 5 a3 Bxc3+ 6 bxc3 cxd4 7 cxd4 Ne7 8 Bg5
Nbc6 9 Nf3 0-0 10 Bd3 Bd7 11 0-0 Qa5? 12 Qb1 b6?? 13 Bd2   1-0

3. Conchess Level T5/P4 after move 33 - Sensory 9 Level 7

1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 a6 6 Bd3 Bg4 7 f3 Bd7 8 Be3 e5
9 Nb3 Be7 10 0-0 0-0 11 Nd5 Nxd5 12 exd5 a5 13 f4 Bh4? 14 fxe5 dxe5 15 d6?
Bg5 16 Bxg5? Qxg5 17 Rel Bc6 18 Be4 Bxe4 19 Rxe4 Nd7 20 Ra4? Qe3+ 21 Kh1 b6
22 Qe1 Qg5 23 Rd1 Rac8 24 Qe2 Qh6 25 c3 Qe6 26 Qf3 Rfe8 27 Re4? Nf6? 28 Rh4 Rc4?
29 Rxc4 Qxc4 30 d7 Rd8 31 Qf5 Qe2 32 Qb1 Rxd7 33 Rel Qh5 34 Qc2 Ng4 35 h3 Qh4
36 Re2 Qh6 37 c4? Ne3 38 Qe4 Rdl+ 39 Kh2 Nfl+ 40 Kgl Ng3+ 41 Rel Nxe4 42 Rxdl
Qe3+ 43 Kh2 Kf8 44 Rd8+ Ke7 45 Rb8 a4 46 Nal Qg3+ 47 Kgl Qel+ 48 Kh2 Qxal
49 Rb7+ Kf6 50 Rb6+ Kf5 51 g4+ Kf4 52 Rb4 Ng3 53 e5+ Kf3 54 Rf4+ exf4 55 h4
Qhl mate. 0-1 Sensory announced mate in 4 on move 52.

4. Sensory 9 Level 7 - Conchess Level T5

1 e4 e5 2 Nf3 Nc6 3 Bb5 Nd4 4 Nxd4 exd4 5 0-0 Bc5 6 Qh5 Qe7 7 Qg4 Kf8? 8 Qf3
Nf6 9 d3 c6 10 Bc4 b5? 11 Bxb5?! cxb5 12 e5! Rb8 13 Bg5 Rb6 14 exf6 gxf6
15 Bh6+ Ke8 16 Qf5 Qe5! 17 Qxe5 fxe5 18 Bg7 Rg8 19 Bxe5 Re6 20 Bg3 Bb7 21 Nd2
Rg5? 22 Nb3 Rf5 23 Rae1 Kf8?? 24 Nxc5 Rxel 25 Rxel Bc6 26 Nb3   1-0

5. Mephisto Level 6 - Sensory 9 Level 7

1 e4 c5 2 Nc3 Nc6 3 f4 d6 4 Bb5 Bd7 5 Nf3 a6 6 Bxc6 Bxc6 7 0-0 Nf6 8 d3 e6 9 b3
Be7 10 Bb2 0-0 11 Rel Ng4 12 Ng5 Bxg5 13 Qxg4 Bf6 14 e5 dxe5 15 fxe5 Bh4 16 Rf1
Qg5 17 Qxg5 Bxg5 18 Ne4? Bxe4 19 dxe4 Be3+ 20 Kh1 Bd4 21 Bxd4 cxd4 22 Rf2 Rad8
23 Radl Rd7 24 a4 Rc8 25 Rfd2 Rcd8 26 Rd3 f6 27 exf6 gxf6 28 c3 e5 29 b4 Kf7
30 b5 axb5 31 axb5 Ke6 32 Rf3 Ra8 33 Rdfl Rf7 34 Rd1 Ra2 35 cxd4 exd4 36 Rfd3 Rd7
37 Rd3d2 Rxd2 38 Rxd2 d3 39 g3 Ke5 40 Kg2 Kxe4 41 Rd1 d2 42 h3 Kd3 43 Rf1 Kc2   0-1

6. Morphy Level 8 - Conchess T5

1 c4 e6 2 Nf3 Nf6 3 g3 d5 4 cxd5? exd5 5 Nc3 Nc6 6 d4 Bf5 7 Qb3? Bb4? 8 Bd2 0-0
9 Bg2 Re8 10 a3 Bxc3 11 Bxc3 Rb8 12 e3 Bd3 13 Radl Bc4 14 Qc2 Ne4 15 Ne5 Nxc3
16 Nxc6?? bxc6 17 Qxc3 Rb3 18 Qc2 Qf6 19 Rd2 Reb8 20 h4 c5! 21 Be4!? dxe4??
22 Qxc4 Rxb2 23 Rxb2 Rxb2 24 0-0 cxd4 25 Qxc7 h6 26 Qxa7 d3 27 Qa8+ Kh7 28 Qxe4+
Qg6 29 Qxg6 Kxg6 30 Rcl? Ra2 31 Rc3??? Ral+ 32 Kg2 d2 33 Rc6+ Kh7 34 Rd6 dl=Q   0-1

7.   Conchess T5 - Morphy Level 8

1 e4 c5 22 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 a6 6 Bd3 e5 7 Nf3 Nc6 8 0-0 Qb6
9 Nd5 Nxd5 10 exd5 Ne7 11 h3? Nxd5 12 Bxa6 Nc3 13 bxc Rxa6 14 Qd3 Qa5 15 Bg5 f6
16 Bd2 Be6? 17 Rfb1 b6? 18 Rb5 Qa3 19 Be3 Bd7! 20 Rxb6? Rxb6 21 Bxb6 Qb2!
22 Qd1 Qxb6 23 Qd5 Qb2 24 Re1 Qxc3 25 Qa8+ Bc8 26 Qa4+ Bd7 27 Qa8+ Ke7 28 Re2
Qc4 29 Rd2 Ke6 30 Qa3 Be7 31 Qb3 Rc8 32 Qxc4 Rxc4 33 Ne1 d5 34 Re2 Ba4 35 Kf1
Bb5 36 Nd3 Ra4? 37 Ke1 Rxa2 38 Kd2 e4 39 Nc1 Bb4+ 40 Kd1 Bxe2+   0-1

8. Sensory 9 Level 7 - Mephisto Level 6

1 Nf3 Nf6 2 g3 c5 3 Bg2 d5 4 0-0 Nc6 5 d3 e5 6 Nc3 d4 7 Nb5 a6 8 Na3 Be6
9 Ng5 Be7 10 Nxe6 fxe6 11 Nc4 Qc7 12 Bd2 0-0 13 Bxc6 bxc6 14 e4 dxe3 15 fxe3 e4
16 Bc3 exd3 17 cxd3 Rac8 18 Rc1 Kh8 19 Be5 Qb7 20 Qf3 Rf7 21 Rf2 Rcf8 22 Na5?!
Qb5! 23 Nxc6 Nd5! 24 Qxf7! Rxf7 25 Rxf7 Qxc6 26 Rcf1 Qe8 27 Rxg7 Bf6 28 Rxf6
Kxg7 29 Rxe6+ Kf7 30 Rxe8 Kxe8 31 d4?? c4 32 Bf4 Nb4! 33 a3 Nd3 34 e4? Kd7
35 d5 Nxb2 36 e5 c3 37 e6+ Ke7 38 Bg5+ Kd6 39 e7 Kd7 40 Bf6? Nd1 41 d6 c2 42 Bg5
Nb2 43 Kf2 Nc4! 44 Ke2 Nxd6? 45 Kd3 Nf7 46 Bf4 Nd6? 47 g4 c1=Q! 48 Bxc1 Kxe7
49 g5 Ke6 50 Bf4 Kd5?? 51 Bxd6 Kxd6 52 Ke4 Kc5 53 Kf5 Kd4 54 h4 Kc4 55 h5 Kb3
56 g6 hxg6 57 hxg6 Kxa3 58 g7 a5 59 g8 = Q Kb4 60 Qb8+ Kc5 61 Qe5+ Kb4 62 Qd4+
Kb5 63 Qb2+ Kc5 64 Qc3 Kb5 65 Qb3+ Kc5 66 Qa4 Kd5   1-0

9.   Conchess Level T5/P4 - Mephisto Level 6

1 e4 e5 2 Nf3 Nc6 3 d4 exd4 4 Nxd4 Qh4 5 Nb5 Qxe4+ 6 Be2 Bb4+ 7 Bd2 Bxd2+
8 Nxd2 Qe5 9 Nf3 Qf4 10 Qd2? Qxd2+ 11 Nxd2 Nb4? 12 Nxc7+ Kd8 13 c3! Nc2+ 14 Kd1 d5
15 Kxc2 Kxc7 16 Bd3 Nf6 17 Rae1 Be6 18 Nf3 Ng4 19 Rhf1 Rae8 20 h3 Nf6 21 Ng5 b6
22 Re3 h6 23 Nf3 Ne4 24 Nd4 Bd7 25 Rf3 f6 26 Rd1 a5 27 Kb1 Ba4 28 Nb5+ Kc6 29 Nd4+
Kb7 30 Bc2 Nd2+ 31 Rxd2 Re1+ 32 Rd1 Rxd1 33 Bxd1 Bxd1 34 Re3 Rc8 35 Ne6!? Bh5
36 Nxg7 Bg6+ 37 Kc1 Ka6 38 Rf3 Rc6 39 Nf5 Bxf5 40 Rxf5 d4! 41 Rf3? dxc3 42 Rxc3
Rxc3+?? 43 bxc3 h5 44 h4 Kb5? 45 g4 hxg4 46 h5 Kc4 47 Kd2 b5 48 h6 b4
49 cxb4 axb4 50 h7 b3 51 axb3 kd5 52 h8=Q 1-0

10. Morphy Level 8 - Sensory 9 Level 7

1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 a6 6 Bg5 e6 7 f4 Be7 8 Bc4 e5 9 Nf5
Bxf5 10 exf5 Nbd7 11 Bxf6? Nxf6 12 Fxe5 dxe5 13 Qe2 Qd4 14 Rad1 Qf4 15 Qf1 Qg5
16 Qf2 Ng4 17 Qf3 Qe3 18 Be2 Bh4+ ?! 19 g3 Qxf3 20 Bxf3 Nxh2 21 Bxb7 Bxg3+ 22 Ke2
Rb8 23 Ne4 Bf4 24 Nd6+ Ke7 25 Rd5 Rhd8! 26 F6+ Ke6 27 Fxg7 Rxd6 28 Rxd6+ Kxd6
29 Bxa6 Rg8 30 Rg1 Ke6 31 Bd3 Kf6 32 Bxh7 Rxg7 33 Rxg7 Kxg7 34 Bd3 Kf6 35 c4 Kg5
36 a4 f5 37 Bb1 e4 38 b4 Kf6 39 c5 Bb8 40 b5 Nf3 41 c6 Ke5 42 Ba2 F4 43 Bc4 Bc7
44 Ka2 Nd4+ 45 Kd2 e3+ 46 Kd3 e2 47 Kd2 Ba5+ 48 Kc1 e1=Q 49 Kb2 Bc3+ 50 Ka3 Qc1 mate
0-1 with 47 Ba5+ Sensory announced mate in 4.

11. Mephisto Level 6 - Conchess T5

1 d4 d5 2 c4 e6 3 Nc3 c5 4 cxd5 exd5 5 Nf3 Nc6 6 Bg5 Be7 7 Bxe7 Ngxe7 8 dxc5? d4 9 Ne4
0-0 10 Qd2? Qd5! 11 Qc2 Bf5 12 Nfd2 Nb4 13 Qb1 Na6! 14 b4 Nxb4! 15 Qxb4 Bxe4
16 Nxe4 Qxe4 17 e3 Nf5 18 0-0-0 a5 19 Qa4 Rac8 20 Qc4 b5 21 Qxb5 dxe3 22 Fxe3
Qxe3+ 23 Kb1 Rb8 24 Rc1 Qe4+ 25 Ka1 Qd4+ 26 Kb1 Rxb5+ 27 Bxb5 Rb8 28 Rce1 Rxb5+
29 Kc1 Qc3+ 30 Kd1 Qd3+ 31 Kc1 Rb1 mate.

12. Sensory 9 Level 7 - Morphy Level 8

1 e4 c6 2d4 d5 3 Nc3 dxe4 4 Nxe4 Nf6 5 Nxf6+exf6 6Be2 Be6 7Nf3 Qd5? 8 0-0 Nbd7
9 c4 Qa5 10 Bf4 0-0-0 11 Bd3 g5 12 Bd2 Bb4 13 Re1 g4 14 a3 Bxd2 15 Nxd2 Nb6 16 Qc2
Qa4 17 b3 Qa5 18 d5 Nxd5 19 cxd5 Qxd5 20 Re3 f5 21 Qc4 Qxc4 22 Nxc4 f4 23 Rxe6
fxe6 24 Be4 h5 25 Ne5 Rd4 26 Re1 Rhd8 27 Kf1 Rf8 28 Bg6 g3 29 hxg3 fxg3 30 Nf3 gxf2
31 Rxe6 Rd5 32 Kxf2 Kd7 33 Re2 Rf6 34 Be4 Rdd6 35 Ke3 Rde6 36 Nd4 Re7 37 Kd2 Kc7
abandoned as a draw some moves later.

13. Morphy Level 8 - Scisys 40/2½

1 c4 Nf6 2 Nf3 e6 3 Nc3 Be7 4 d4 0-0 5 Bf4 Nc6 6 e4 Nh5 7 Qc1 Nxf4 8 Qxf4 d6 9 Be2?
Nxd4! 10 Nxd4 e5 11 Qe3 Bg5 12 Qd3 exd4 13 Qxd4 Be6 14 0-0 Qd7 15 Rfd1 Bf6 16 Qd3
Rae8 17 Rac1 Bg5 18 Rb1 Bf4 19 c5! b6 20 Qf3 Be5 21 c6! Qc8 22 Nd5 f6 23 Qe3 Bxd5
24 Rxd5 f5! 25 Bc4 Kh8 26 f4 Bf6 27 e5 dxe5 28 fxe5 Qe6 29 Re1 Qxc6 30 Qd4 Qa4
31 b3? Qb4 32 Qa1 c6 33 Rd7 Qc5+ 34 Qd4 Qxd4 35 Rxd4 Bxe5 36 Rda1 Bd4+ 37 Kf1 Re4
38 g3 Rd8 29 a3 c5 40 Re2 Rxe2 41 Kxe2 Re8+ eventually drawn.

14. Scisys 40/2½ hr - Morphy Level 8

1 c4 c5 2 Nf3 Nf6 3 Nc3 Nc6 4 d4 cxd4 5 Nxd4 e5 6 Nf3 Bc5 7 g3 Qb6 8 e3 0-0 9 Bg2
d6 10 0-0 Qb4 11 Qd3 Bd7 12 Rb1 Qb6 13 Na4 Qc7 14 Nxc5 dxc5 15 Qa3? e4? 16 Nd2 Qe5
17 b3 Rae8 18 Bb2 Qf5 19 Bxf6 gxf6 20 Nxe4?? Rxe4 21 Bxe4 Qxe4 22 Qxc5 Bh3 23 Qd5
Qxd5 24 Cxd5 Bxf1 25 dxc6 Bb5 26 cxb7 Rb8 27 a4 Be8 28 Rd1 Rxb7 29 Rd3 Bd7 30 Rd4!
a5? 31 Rd5 Be6? 32 Rxa5 Rxb3 33 Kg2 Rb4 34 Ra7 Bd5+ 35 Kh3 Rb2 36 f4 Re2 37 Ra5
Bb3 38 Ra8+ Kg7 39 e4 Rxe4 40 a5 Re2! 41 g4 Be6? 42 f5? Bd5 43 Ra7? Re3+ 44 Kh4
Bg2 45 g5 Rh3+ 46 Kg4 Bf1 47 Re7 Rxh2 48 Re1 Rf2 49 Rc1 Be2+ 50 Kg3 Rf3+ 51 Kg2
Rxf5 0-1

15. Scisys 40/2½ - Sensory Level 7

1 d4 Nf6 2 c4 g6 3 Nc3 d5 Qb3 dxc4 5 Qxc4 Bg7 6 e4 0-0 7 Nf3 Bg4 8 Bf4 Na6
9 Be2 Nh5 10 Be3 Be6 11 Qb5 Bc8 12 0-0 Qd6 13 h3 Nb4 14 e5 Qb6 15 Qxb6 axb6
16 Rfc1 Bf5 17 Ne1 c5 18 dxc5 Bxe5 19 a3 Bxc3 20 bxc3 Nd5 21 cxb6 Ng3 22 fxg3
Nxe3 23 c4 Bd7 24 Rc3 Nf5 25 g4 Nd6 26 Rd3 Bc6 27 Re3 Rfe8 28 Rd1 Nc8 29 c5 Ra5
30 Rdc1 e6 31 Nf3 Ne7 32 Ne5 Rea8 33 Nxc6 Nxc6 34 Rcc3 Kf8 35 Bf3 Nd8 36 g3 Ke7
37 Red3 Rc8 38 Rd1 Rc8 c5 39 Rcd3 Nc6 40 Rd7+ Kf8 41 Rxb7 Rxa3 42 Bxc6 Rxc6
43 Rdf1 f5 44 gxf5 exf5 45 Rd1 Ke8 46 Re1+ Kd8 47 Kh2 Rc2+ 48 Kh1 Rxg3 49 Rxh7
Rc2 c3? 50 Kh2 Rge3 51 Rxe3 Rxe3 52 Rh8+ Kd7 53 b7 1-0

16. Sensory 9 Level 7 - Scisys 40/2½

1 c4 e5 2 Nc3 d6 3 Nf3 f5 4 e3 Nbd7 5 Be2 Be7 6 d4 e4 7 Nd2 Ngf6 8 0-0 0-0
9 Nb3 Nb6 10 Bd2 Be6 11 Na5 Qc8 12 Rc1 Bd7 13 Bh5 Nxh5 14 Qxh5 g6 15 Qd1 a6
16 c5 dxc5 17 dxc5 Bxc5 18 Nxe4 fxe4 19 Rxc5 Be6 20 Qc2 Rf7 21 Qxe4 fxe4 19 Rxc5
Be6 20 Qc2 Rf7 21 Qxe4 c6 22 Nxc6 Qd7 23 Ba5 Bd5 24 Qd4 Bxc6 25 Bxb6 Qe6 26 Ra5
Bb5 27 Rc1 Rd7 28 Qb4 Qxb6 29 a4 Qd8! 30 Re1 b6! 31 Rxb5 axb5 32 Qxb5 Rf7
33 b4 Rf7 a7 34 Real Rxa4 0-1

17. Mephisto Level 6 - Scisys 40/2½

1 e4 c5 2 Nc3 Nc6 3 f4 e6 4 Bb5 Nge7 5 Nf3 d5 6 exd5 exd5 7 Ng5 Bf5 8 0-0 c4
9 Re1 Qb6+ 10 Kh1 Qc5 11 d4 Qd6 12 b3 h6 13 Qh5 g6 14 Qh4 Bxc2? 15 bxc4 f6
16 cxd5 a6 17 Re6 fxg5 18 Qf2 Qb4 19 dxc6 axb5 20 Qxc2? b7xc6 21 Nd5?? cxd5
22 Qc5?? Qxc5 23 dxc5 Bg7 24 Rb1 Rxa2 25 fxg5 0-0 26 Be3 Kf7 27 Rb6 h5 28 Rf1+
Kg8 29 Rxf8 Kxf8 30 Rb8+ Kf7 31 g3 Ra1+ 32 Kg2 Re1 33 Bf2 Rb1 34 Rb7 Rb2 35 Kg1
Rb1+ 36 Kg2 Be5 37 Be3 Rb2+ 38 Kf3 Rxh2 39 Rxb5 Rc2 40 G4 h4 0-1

18. Scisys Mark VI 40/21 - Mephisto Level 6

1 e4 e5 2 Nf3 Nc6 3 Bb5 a6 4 Bxc6 dxc6 5 Nc3 f6 6 d4 exd4 7 Qxd4 Bg4 8 0-0
Bxf3 9 Qxd8+ Rxd8 10 gxf3 b5 11 Bf4 Bd6 12 Bxd6 cxd6 13 h3 Ne7 14 Rad1 0-0
15 Kg2 f5! 16 Rfe1 fxe4 17 fxe4 b4 18 Na4 Ng6 19 Re3 Nf4+ 20 Kh1 Ne6 21 Kg1 Ng5
22 Kg2 Rf4 23 f3 Nf7 24 Rb3 c5 25 Nb6! Ne5 26 Nd5 Rf7 27 f4 Nc4 28 e5 Re8 29 exd6
Nxd6 30 Nxb4! cxb4 31 Rxd6 Rxf4 32 Rxa6 Re2+ 33 Kg3 Rc4 34 Ra8+? Kf7 35 Rf3+?
Kg6! 36 Ra6+ Kh5 37 Rf5+ g5 38 Rf7 Re3+ 39 Kf2 Rxh3 40 Rxh7+ Kg4 41 Rxh3 Rxc2+!
42 Ke1 Kxh3 43 b3 g4 44 Kd1 Rg2? 45 Rh6+ Kg3 46 Ra6 Kf3 47 Rf6+ Ke3 48 Re6+ Kd3
49 Rd6+ Kc3 50 Rc6+ Kb2 51 Ra6 g3 52 Ra5? Rc2 53 Rg5 g2 54 Ke1 Kxa2 55 Rg3 Rb2
56 Rg5 Kxb3 0-1

19. Conchess T5 - Scisys Mark V1 80/300

1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 a6 6 Bd3 e5 7 Nf3 Be7 8 0-0 0-0
9 Be3 Be6 10 Nd5??? Bxd5 11 exd5 e4 12 Bxe4 Nxe4 13 Qd3 f5 14 Qb3 0-1

20. Scisys Mark V1 80/300 - Conchess T5

1 e4 e5 2 Nf3 Nc6 3 Bb5 Nd4 4 Nxd4 exd4 5 0-0 Bc5 6 d3 Ne7 7 Bg5 0-0 8 Nd2 f6 9 Bf4 d5
10 Nb3 Bb6 11 Qd2 a6 12 Ba4 Be6 13 exd5 Qxd5 14 Qb4 Ng6 15 Bd2 Kh8 16 Rae1 Rad8 17 f3
Rd6 18 Re2 Qh5 19 Rfe1/c5 20 Qa3 Qd5 21 Re4 f5 22 Re2 f4 23 Re4 Kg8 24 Nd4 c4 25 dxc4
Bxd4+ 26 Kh1 Bxb2 27 Qxb2 Qxd2 28 c5 Bf5 29 Bb3+ Kh8 30 exd6 Bxe4 31 Qb1 Bf5 32 Rd1 Qc2 33 h3 Bd7
34 Rd3 Qc5 35 a4 Ne5 36 Rd5 Qc3 37 Rd1 Nxf3 38 Ba2 Nd2 39 Qxb7 Bc6   0-1