

XIANGQI : AN ANNOTATED MASTER GAME

Xiangqi has always featured prominently in VC, but I doubt if much of our coverage has been at a level beyond that of "good Western". For our final issue in present form, I thought it might be a good idea to present a true master game, expertly annotated. It is from round 8 of the 1993 China National Open, and I have taken it from the web site <www.wxf.org>

of the World Xiangqi Federation. Red was **Xu YinChuan**, who came into the round with a score of 5/7 including +1, -1 against two former champions, Black was **Liao ErPing**. Notes in quotation marks '...' are by the winner, translated by Felix Tan and lightly edited by myself.

In the past, I have used the same algebraic notation for xiangqi as VC uses for other games on a square lattice board. This being our last issue, however, it seems useful also to present and explain the descriptive notation used on <www.wxf.org> and in other Chinese sources.

10	r	h	e	g	k	g	e	h	r
9	.	.	.	:	:	:	.	.	.
8	.	c	.	:	:	:	.	c	.
7	p	.	p	.	p	.	p	.	p
6	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.
4	P	.	P	.	P	.	P	.	P
3	.	C	.	:	:	:	.	C	.
2	.	.	.	.	.	.	.	.	.
1	R	H	E	G	K	G	E	H	R

1 P7+1 C2=3 Pc4-c5 Cb8-c8

Red moves the pawn on his file 7 forward one point (each player numbers the files 1...9 from his right), Black moves the cannon on his file 2 sideways to his file 3.

2 C2=5 E3+5 Cg3-e3 Ec10-e8

Red moves the cannon on his file 2 to file 5 (the central file), Black the elephant on his file 3 forward to file 5.

10	r	h	.	g	k	g	e	h	r
9	.	.	.	:	:	:	.	.	.
8	.	.	c	:	e	:	.	c	.
7	p	.	p	.	p	.	p	.	p
6	.	.	.	.	.	.	.	.	.
5	.	.	P	.	.	.	.	.	.
4	P	.	.	P	.	P	.	P	.
3	.	C	.	:	C	:	.	.	.
2	.	.	.	.	.	.	.	.	.
1	R	H	E	G	K	G	E	H	R

'In the Thunderbolt defence (Cc8 in reply to Red's opening Pc5), centralizing the right Elephant is the prevailing variation. In those days before opening theory flourished, 2...Hg8 had been quite popular till Red gradually developed a system of effective attack. For example: Hg3, Rh10; Hc3, Pc6; Hd5, Pxc5; Hf6, Ece8;

Cb8, Red has the upper hand. In the process of trial and test, only opening systems with greater vitality will remain. Therefore, Hg8 has been replaced by Ece8 and Ege8. The right Elephant move is more common in tournaments, "habit becomes second nature" perhaps.' I am converting moves to algebraic notation even within quotations.

These Elephant moves gambit the centre pawn. I asked C. K. Lai why Red did not take it, there being neither note nor obvious refutation. 'The Red side is aiming for a more steady and sustainable long term attack, further Red may not like to throw in his force so early without more preparation and deeper testing of his opponent. This is not to say that 3 Cxe7+ cannot be considered.' Paul Byway adds that the pawns aren't worth much early on and the loss of tempi weighs more heavily. Furthermore, keeping the threat in being may be stronger than executing it now (see two of the notes to the subsequent play).

3 H2+3 Hh1-g3

Red moves the horse on his file 2 forward to file 3.

'The essence of this opening line. Red allows the enemy Pawn to charge across, in exchange for speed to develop his major pieces. It's rather difficult to appraise the deal, as the pluses and minuses are discernibly small. Only through devoted study and constant practice could one make the best of this variation.

'Of course Ha3 is also playable. After Ri9; Hg3, Rd9; Rb1, Gde9 (if Rd6, Cxe7+ followed by Cxi7 giving Red a slight edge with a pawn surplus); Rh1, Rd6, a relatively calm game since Red has posted his Horse to the edge. One may ask: "If it is no harm allowing a crossed Pawn, why doesn't Red also play Hc3?" The answer is in the following sequel: Pc6; Hd5, Pxc5; Hxe7, Hd9 when Black has a solid position and active play ahead.'

3 R9+1 Ri10-i9

'Developing the Chariot via the second rank leads to a relatively closed game. If Black plays Pc6, after R1, Pxc5; Ha3, Ri9; Rb1, Rd9; each has achieved something: a crossed Pawn for Black, and a gain of tempo for Red.'

4 H8+7 Hb1-c3

10	r	h	.	g	k	g	e	h	.
9	.	.	.	:	:	:	.	.	r
8	.	.	c	:	e	:	.	c	.
7	p	.	p	.	p	.	p	.	p
6	.	.	.	.	.	.	.	.	.
5	.	.	P	.	.	.	.	.	.
4	P	.	.	P	.	P	.	P	.
3	.	C	H	:	C	:	H	.	.
2	.	.	.	.	.	.	.	.	.
1	R	.	E	G	K	G	E	.	R

'Venturing with his Horse instead of Ri2, Red is laying a bait for the enemy. If Black is not vigilant, he may fall into the trap with Pc6; then Pxc6, Cxc3; Rh1, Ri8; Cb5, Pi6; Cxe7+, Gfe9; Ca5, Ha8; Rh7 with an overwhelming attack. Since Yan WenQing staged this variation in the 1990 National Championship, the move 4...Pc6 has fallen into oblivion.' Cb5 is a vicious move, threatening Ci5 (hence Black's Pi6) as well as the actually played Ca5.

4	R9=2	Ri9-b9	11	C8=6	Ch8-f8
5	R1=2 H2+4	Ri1-h1 Hb10-d9	12	C6-2	Cd3-d1
6	C8=9 H8+9	Cb3-a3 Hh10-i8			
7	H7+6 P9+1	Hc3-d5 Pi7-i6			
10	r . . g k g e . .		10	. . . g k g e . .	
9	. r . h : : . . .		9	. r . h : : . . .	
8	. . c : e : . c h		8	. . c : e c . . h	
7	p . p . p . p . .		7	p . p . p . p R .	
6	. . . . . p		6	. r p	
5	. . P H		5	. . P H	
4	P . . . P . P . P		4	P . . . P . P . P	
3	C . . . C : H . .		3	C . . . E : H . .	
2	. . . . .		2	. . . . G : . . .	
1	R . E G K G E R .		1	R . . C K G E . .	

'In view of his well coordinated formation and Black's weakness of the E-eye Horse, Red is willing to compromise by moving his Cannon away. As for Black, though his right Horse is somewhat awkward, it can be supported by the 1st file [a-file] Chariot. Moreover, his other Chariot can go forward to harass the enemy camp. The game is playable for Black.' The points d9, f9, d2, f2 are known as "the eyes of the elephants".

8 C5=6 Ce3-d3

'Making way for the Elephants to be connected. Some players prefer Cad3, with the same purpose of menacing the opponent's E-eye Horse, while still keeping an eye on his central Pawn. It is six of one and half a dozen of the other.'

8 R1+1 Ra10-a9
9 A6+5 Gd1-e2

Some writers on xiangqi use A (Advisor) for the piece we have been calling G (Guard) in VC. I have also seen M (Mandarin).

9 R2+3 Rb9-b6
10 R2+6 R1=2 Rh1-h7 Ra9-b9

10	. . . g k g e . .
9	. r . h : : . . .
8	. . c : e : . c h
7	p . p . p . p R .
6	. r p
5	. . P H
4	P . . . P . P . P
3	C . . . C : H . .
2	. . . . G : . . .
1	R . E : K G E . .

11 E7+5 Ec1-e3

'How about Ege3? A possible continuation would be: Cf8; Cd1, Gde9; Cad3, Cd8. Had Red played Ece3 earlier, he could now capture Black's 3rd file [c-file] Pawn at once. Examples of such delicate differences always prevail a game. Xiangqi lovers who wish to sharpen their skills must study them carefully, comparing one variation against another.' The point is that with c1 empty, Red can play Hxc7 after the above, meeting Cxd1 with Hxb9. With c1 still occupied, Black would now have Cxa1+.

'At this moment, the focus of Red's manouevre is whether he can pile up both Cannons along the 6th [d] file to attack the Black Horse. In retrospect, had Red played 8 Cad3, Black would still have Rb5 to accomplish the harassing mission -- one just can't have the best of both worlds. Having said that, I could not help but to ponder further, "We thirst after victory, and hope that our opponent does not make the best move. But on the other hand, in order to play the best move, you must, at every step of the game, look from your opponent's perspective and design the best move for him." Confucius said, "Don't give others what you dislike." Shouldn't it be the same in playing xiangqi?'

The Chariot move is given as "R2+4", which in the present position translates as Rb2. However, this would do little, and I think it is more naturally interpreted as the Rb5 which it would have been if played at move 8. This move would have been more effective after Red's Cad3 than after his actual Ced3, since Red would not have been able to bring an Elephant to e3 to defend the c5 pawn.

12 R++3 Rb6-b3
13 P3+1 A4+5 Pg4-g5 Gd10-e9
14 H3+4 C6+1 Hg3-f5 Cf8-f7

10	. . . : k g e . .
9	. r . h g : . . .
8	. . c : e : . . h
7	p . p . p c p R .
6	. . . . . p
5	. . P H . H P . .
4	P . . . P . . . P
3	C r . . E : . . .
2	. . . . G : . . .
1	R . . C K G E . .

'This same position occurred in the game I played against Zhao GuoRong in round 4. Frankly speaking, I felt a bit uneasy when my worthy opponent from Jiangsu mimicked the line. Psychological factors aside, the Red Chariot is not standing at a good spot, so chasing it away has no significance. Worse still, the text move weakens Black's formation. Cc10 is recommended here, an implicit and resourceful alternative.' Zhao GuoRong was one of the two former champions Xu YinChuan had met in earlier rounds, and the one against whom he had lost.

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10 . . . . : k g e . .
 9 . r . h g : . . .
 8 . . c : e : . . h
 7 p . p . p c p R .
 6 . . . . . . . p
 5 . . P H . H P . .
 4 P . . . P . . . P
 3 C r . . : E : . . .
 2 . . . . : G : . . .
 1 R . . C K G E . .
    
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15 R2-2 P5+1 Rh7-h5 Pe7-e6
16 P3+1 P7+1 Pg5-g6 Pg7xg6
17 R2+2 C6-1 Rh5-h7 Cf7-f8
18 R2=6 Rh7-d7
    
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10 . . . . : k g e . .
 9 . r . h g : . . .
 8 . . c : e c . . h
 7 p . p R . . . . .
 6 . . . . . p . p . p
 5 . . P H . H . . .
 4 P . . . P . . . P
 3 C r . . : E : . . .
 2 . . . . : G : . . .
 1 R . . C K G E . .
    
```

‘With a formidable Pawn sacrifice, Red opens up Black’s Pawn rank for his Chariot which is ready to reinforce the Cannon’s attack on the enemy Horse along the 6th [d] file. Besides, his two Horses are standing firmly at the riverbank to loom over the enemy ground. What a lively formation! In my game against Zhao GuoRong mentioned earlier, Zhao reacted with Cd8; Hd4, Rb1; Rxb1, Rxb1; Hf4? (should play Hxc7, with simple superiority), Hb8; Rxc7 (correct is Rd6), Cxd1; Gxd1, Pe5! With this stealthy Pawn cross, Black turned the tables. As a veteran player, Liao should have all the information about this line at his finger tips. As expected, Liao took a new course after brief pondering.’ If after Black’s Pe5 Red plays Pxe5, Rb4 skewers his Horses.

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18 P7+1 Pg6-g5
19 H4-6 R+-1 Hf5-d4 Rb3-b4
20 H++4 Hd5-f6
    
```

```

10 . . . . : k g e . .
 9 . r . h g : . . .
 8 . . c : e c . . h
 7 p . p R . . . . .
 6 . . . . . p H . . p
 5 . . P . . . p . . .
 4 P r . H P . . . P
 3 C . . . : E : . . .
 2 . . . . : G : . . .
 1 R . . C K G E . .
    
```

depicting a battle scene of “shining weapons and sturdy horses”. If Hc2 instead, then Rb6; Pc6, Rb2; Rxd9, Rxd9; Cxd9, Pxc6; Hd4, Rb9; re-capture will follow, and Red has gained nothing.’

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20 H4+5 Hd9-e7
21 H6-7 R++2 Hd4-c2 Rb4-b2
22 R6=5 R+=3 Rd7xe7 Rb2xc2
23 R5=7 P7=6 Re7xc7 Pg5-f5
    
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```

10 . . . . : k g e . .
 9 . r . : g : . . .
 8 . . c : e c . . h
 7 p . R . . . . .
 6 . . . . . p H . . p
 5 . . P . . . p . . .
 4 P . . . P . . . P
 3 C . . . : E : . . .
 2 . . r : G : . . .
 1 R . . C K G E . .
    
```

‘As shown in the diagram, with the Chariot dominating the entire Pawn Rank, Red’s pieces all spring to life. Danger is already lurking in Black’s ground. Apparently, Liao is ignorant of the situation. He still stakes his game on the crossed Pawn. Because of this weakening move, cracks appear in his fortification. At this critical moment, he should have played Rc4 enticing Cxa7, then Pf5. By giving up an edge Pawn to improve the position of his Chariot, he can slow down Red’s attack, and the result is unclear.’

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24 C6+6 Cd1-d7
    
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‘An easy and graceful move, this Cannon sally hits the nail on the head. Suddenly, Black is besieged on all sides, which he has never anticipated.’ Red’s next move, Ce7, will produce the “iron bolt” which we saw in humbler circumstances in VC 47. This will paralyse Black’s central defenders and leave his General open to attack both from the left and from f8/g9, and he will soon be overwhelmed.

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24 R3-2 Rc2-c4
25 C6=5 R3=1 Cd7-e7 Rc4xa4
26 H4+2 R2-1 Hf6-h7 Rb9-b10
27 P7+1 R1-2 Pc5-c6 Ra4-a6
28 E5+7 C6=8 Ee3-c5 Cf8-h8
29 R9=6 R1+1 Ra1-d1 Ra6-a5
30 C9=3 R1=3 Ca3-g3 Ra5xc5
    
```

```

10 . r . : k g e . .
 9 . . . . : g : . . .
 8 . . c : e : . c h
 7 p . R . C . . H .
 6 . . P . p . . . p
 5 . . r . . p . . .
 4 . . . . . P . . . P
 3 . . . . : : : C . .
 2 . . . . : G : . . .
 1 . . . R K G E . .
    
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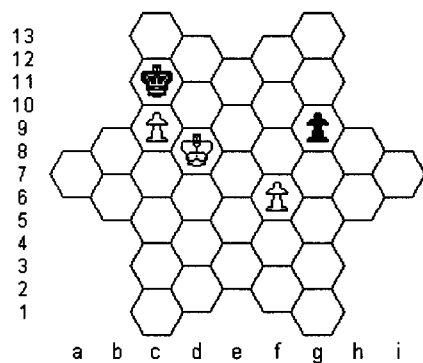
31 R7+1 Rc7xc8
    
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‘Red wins.’ The threat is Hf8 mate, and if Cxc8 then Hg9+, Hxg9; Cxg10 mate.

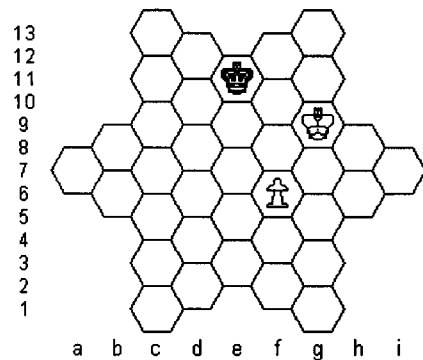
‘The Red Horses have performed a nice “Pas de deux”,

POLGAR SUPERSTAR CHESS

Árpád Rusz has sent me a further selection of over 70 endgame studies and problems. I have selected three instructive pawn endings, plus one "retro" puzzle which I would have offered to Peter Fayers for "Proof Games" had I received it before his pages had been processed and put to bed. For the rules, see our last three issues.



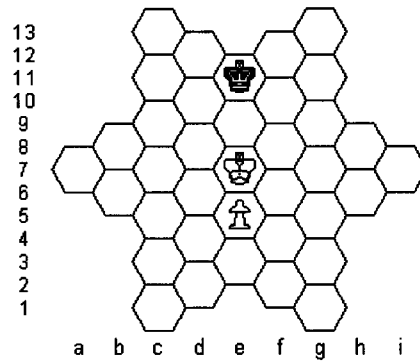
Take away the pawns on the f and g files, and White would have no way of winning. As it is, try the natural 1 Ke9 Kxc9 2 Kf10 Kd10 3 Kxg9; no, 3...Ke11,



and again this is only drawn.

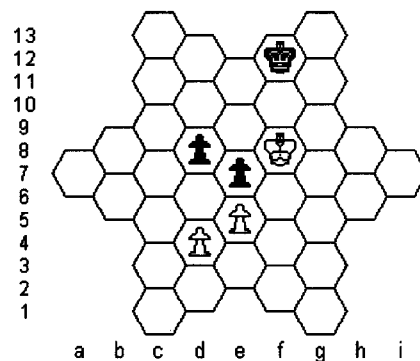
To improve on this, White must play to return to the starting position with Black to move, 1 Kc7 Kd12 2 Kd6! Kc13! (2...Kc11 3 Kd8 at once, 2...Ke11 3 c11 and promotes) 3 Ke7! Kc11 (3...Kd12 4 Ke9 as below) 4 Kd8. Now Black must retreat, 4...Kd12, and after 5 Ke9 White is a tempo ahead of the previous line and will win in comfort: 5...Kc11 6 Kf10 Kxc9 7 Kxg9 etc (7...Kd10 8 f8 Ke11 9 Kg11).

Before looking at Árpád's next study, let us examine the position below :



Black to play loses quickly, 1...Kd10 2 Kf8 Ke11 3 e7 with 3...Kc- 4 Kf10 or 3...Kf12 4 Ke9. White to play can win if his pawn is unmoved and so still has its two-step option, 1 Kd8 Kf10 (else 2 Ke9 etc) 2 Kd10 Kf8 3 e9+ etc, but if his pawn has arrived at e5 from d4 or f4 (a so-called "limping" pawn), it will have lost this option and the ending is only drawn.

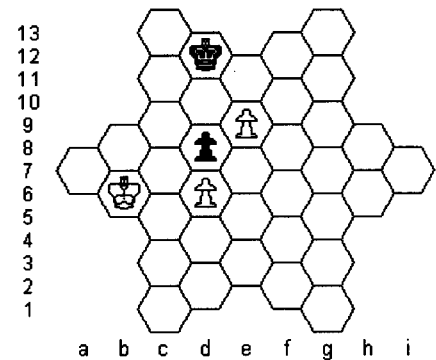
This is brilliantly exploited in the study which follows.



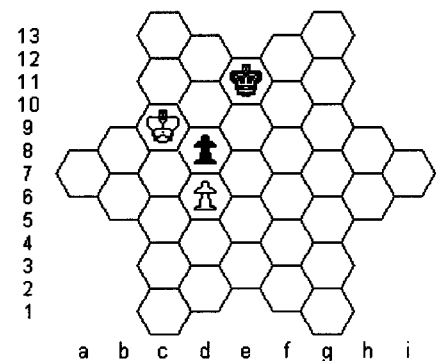
Try 1 Ke9 Pd6 2 Kxe7: no, 2...Pxe5 3 Pxe5 Ke11 gives the draw above, White's new pawn at e5 having no two-step option. Nor is 3 Kxe5 any better, since Black will again reply 3...Ke11 and will draw in comfort. And if 1 Pd6 then 1...Pxd6 2 Pxd6 Ke11, and once again Black will have an easy draw.

I gave up at this point, and had to be told. 1 Ke9 Pd6, is correct, but now White must play the switchback move 2 Kf8!! If 2...Pxe5 then 3 Pxe5 Ke11 (nothing else is better) 4 Kxe7, and since it is now Black's move White has his win. If instead 2...Ke11 then 3 Kxe7 threatening 4 Kxd6, and after 3...Pxe5 4 Pxe5 we have the same position.

The next study will leave White with even more work to do before he can safely capture Black's last pawn.

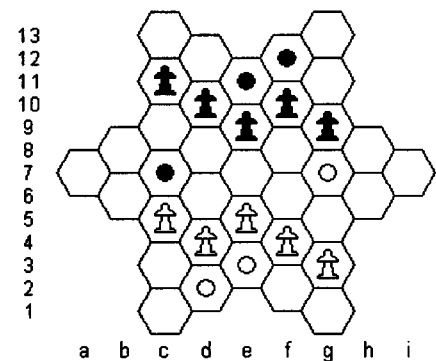


White can home in on the pawn by 1 Ka7! Ke11 2 Kb8 Kxe9 3 Kc9, but after 3...Ke11 he must be very careful :



If White gobbles the pawn at once, 4 Kxd8, Black will play 4...Kd12 and draw. White must play 4 Kc11! and drive Black right away from the corner, 4...Ke9 5 Kd12! Kf10 6 Kd10 Kf12 7 Ke9!! (7 Kxd8 Ke11 is still drawn) Kg11, and now 8 Kxd8 does win (8...Kf10 9 Kd10 and the pawn will be ushered through).

Finally, in the outline position below, identify the pieces.



Answer on page 242.

ADVENTURES IN CAPABLANCALAND : SEIRAWAN CHESS

by John Vehre

John Vehre was inspired by last time's Grand Chess article to offer two annotated games of Seirawan Chess. Yes please, I said. - JDB

Unlike our editor, I have long been a fan of pieces that add the power of a knight to a bishop's or rook's move. This fascination began when as a teenager in the 1970s, I first came across an account of Capablanca's chess variant that was included in Edward Lasker's autobiography *Chess Secrets I Learned from the Masters*. I honestly don't know why I found the new pieces to be so interesting. Probably like many new players I was quite attached to the tactical possibilities that the powerful queen offered to my youthful mind, and if one queen-like piece is good, then adding two more nearly equally powerful pieces had to make chess three times better!

As fascinating as I found these new pieces to be, it would be many more years before I explored them further. Even at 13, I soon discovered that chess itself was more than complicated enough, and there were many openings to learn, techniques to master and tournaments to play. I would quickly forget about Capablanca's variant.

However, our first love is often not our only love, and I would flirt again with "Capablanca's" chess during one of my periods of disillusionment with chess. In the mid 1980s, I discovered the Knights of the Square Table (NOST) correspondence chess group and that people actually played chess variants by mail. While nobody at that time was playing Capablanca's Chess, I was steered toward Wayne Schmittberger who did play a game called Grand Chess. This resulted in a short match and a nice miniature win for him, that was first published in NOST's club magazine and later in

the Grand Chess section of the original *Encyclopedia of Chess Variants*.

Alas one opponent, no matter how strong, was not enough to keep me from returning to Caissa's embrace. After my brief flirtation with Grand Chess, I would resume good old correspondence chess, and for another 15 years would pursue the chimera of qualifying for the U.S. national correspondence championship tournament. It was only at the turn of the millennia, when as a grizzled old correspondence chess veteran, that I suddenly realized that Fritz and his cousins were having more fun at correspondence chess than I was, and maybe it was time to try something else. Fortunately by then there was the Internet and dozens of opponents to do battle with in about any conceivable chess variant. Now 70 or 80 games later, it is time to dust off those old chess writing skills and look at these variants.

Seirawan Chess is a rather late addition to the numerous games with these "Knight riders". Unlike Grand, Gothic, Janus, or Embassy Chess, it does not require a 10x8 or 10x10 expanded board. It does however use the oft repeated R+N and B+N movers that have been popular alternatives to classical chess since Carrera dabbled with Centaurs and Champions in the 17th century. The well known U.S. Grandmaster, Yasser Seirawan and the Canadian master and lawyer Bruce Harper named their "new" pieces the Elephant (R+N) and Hawk (B+N). Seirawan chess's novelty lies in the fact that the new pieces rather than being set up in the initial array are introduced by drop as in the Japanese game Shogi. Unlike that game the new pieces can only be brought into play on the player's own base rank. Seirawan Chess also differs from Shogi in that a drop is not a unique move. The new pieces instead are introduced simultaneously with moving one of the original pieces off of the base rank. In the English opening: 1 c4 e5 2 Nc3/Hb1 would be an example of moving the Knight to c3 and introducing the Hawk (B+N mover) on the vacated b1 square. The new pieces also can be introduced as

part of castling. In the Ruy Lopez 1 e4 e5 2 Nf3 Nc6 3 Bb5 Nf6 after 4 0-0/Ee1, White introduces his Elephant (R+N mover) on e1 along with the castling maneuver. White also has the option with 0-0 to fill the Rook's vacated square on h1 and 4 0-0/Eh1, and while it is not necessarily a good move, it is possible. One other rule to keep in mind is that the pieces can only be introduced simultaneously along with the move of one of the original pieces. If for some reason you forget to enter your Hawk or Elephant after all the base pieces have made their first move, you forever lose the opportunity to bring that piece into the game. Not only would this be embarrassing, but probably fatal for your game!

Seirawan Chess's use of the ordinary 8x8 board probably makes it an ideal venue to persuade a chess playing friend to try a game with B+N and R+N movers. It does not require your partner to adapt to a larger more awkward board, only to larger more awkward pieces!

Limited drop chess variants are not new and the IAGO chess system among others had already introduced this concept. However Seirawan Chess is quicker and more volatile than this variation as its drop move is combined at the same time with moving a piece off of the back rank. This speeds play considerably and allows certain tactical devices that would not be possible when separating moves and drops.

To illustrate the possibilities of Seirawan Chess, I have included two games below. The first is from a simultaneous exhibition in Vancouver that took place three years ago, where the two inventors actually faced off against each other. The game, while hardly free of mistakes, was quite interesting and shows many of the tactical possibilities not only in the opening and middlegame phases of the game, but in the ending as well.

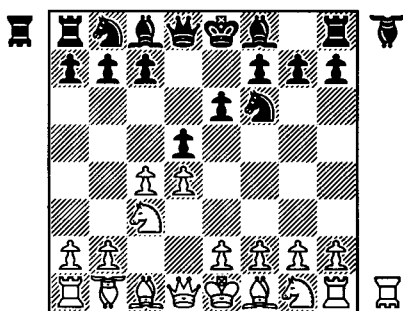
Vancouver Simul, March 31, 2007.
White Yasser Seirawan, Black Jamie Harper and Bruce Harper.

1	d2-d4	Ng8-f6
2	c2-c4	e7-e6
3	Nb1-c3/Hb1	

If we can believe John Watson, there are no longer any rules in chess, and the rules that have been expounded for many years are just guidelines with many exceptions. But if we were to lay rules of play down for Seirawan Chess, one might be to enter your Hawk quickly, but don't be in such a big hurry to bring in your Elephant. Why this is so might be illustrated by this little example. In chess the deadly dull Berlin Defense is quite popular among professional players, but if Black plays 1 e4 e5 2 Nf3 Nc6 3 Bb5 Nf6 4 0-0 Nxe4 5 d4 Nd6 6 Bxc6 dxc6 7 dxe5 Nf5 in Seirawan Chess he would find himself mated after 8 Qxd8/Ed1! Holding back the Elephant's entry deters such early attempts to exchange queens on the d file.

The Hawk also is a more versatile piece in the opening and in a game like Seirawan Chess where the piece density is high, the diagonal move allows this piece to glide through the debris on the chess board much more easily than the orthogonal dominant Elephant. Here the Nc3/Hb1 combination move is also quite natural. In close openings like the English or Queen's Gambit Declined it allows White to play the pawn break e4 almost as easy as it would be to play d4 in a conventional open game.

3 ... d7-d5



4 Bc1-g5

Just because you can play a move does not necessarily mean you should play it. 4 e4 while tempting is premature. After 4...dxe4 5 Nxe4 Bb4+/Hf8 [Entering the Hawk is necessary. After 5...Bb4+ alone, White would have a winning game after 6 Bd2/Ec1 Qxd4/Ed8 7 Bxb4 Nxe4 8 Qxd4 Exd4 9 Nf3 Ec6 10 Hxe4 Exb4 11 Hc3 forking the

elephant and g7 with a decisive win in material. Even against the better 7...Qxe4+ 8 Hxe4 Exd1+ 9 Exd1 Nxe4 10 Bd3 Nf6 11 0-0 White has considerable compensation for his small material disadvantage.*] 6 Bd2/Ec1 Qxd4/Ed8 7 Bxb4 Nxe4 8 Qxd4 Exd4 9 Nf3 Ec6 10 Hxe4 Exb4 and with g7 now defended White has little to show for his pawn minus.

4 ... Bf8-e7
5 e2-e3 Nb8-d7

Black is not leaving himself many options for entering his Hawk and Elephant. 5...Nbd7/Hb8 was worth considering. Black seldom refuses to play a later ...c6 or even ...c5 in a Queen's Gambit and once these moves are played, the Hawk would already be sitting on a natural diagonal for that piece.

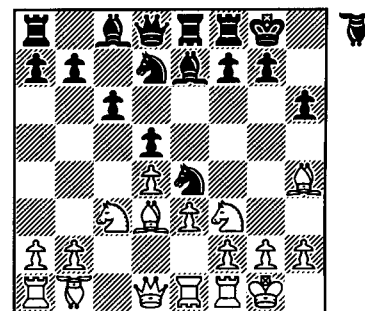
6 Ng1-f3

It is unlikely that Seirawan Chess will ever be played to an extent where real subtleties are explored in its openings. Still, Yasser liked to play the Exchange QGD in chess and since he does it in a few moves anyway, it might have been better to play 6 cxd5

* One could and many have in fact written entire articles on the differences between the relative average values of the B+N mover, the R+N mover and the Queen. The author believes that, at least on an 8x8 board, the Hawk and Elephant are roughly equivalent in value, with the Queen being worth more, but not quite a whole pawn more than the other two pieces. As a rule of thumb, and especially in the early stages of the game, the Hawk with its diagonal move has a much easier time of maneuvering on the board with many pieces and pawns present. As pieces and pawns are exchanged, the Elephant, like the Rook, increases in power until it really shines in the endgame. However games like Seirawan Chess and other variants that use these powerful pieces are more frequently decided in the opening or middle game. Consequently, the Elephant often is not able to test his strength against the Hawk in a pure endgame, since the game has long ago ended in a checkmate or other decisive gain!

now. After 6...exd5 7 Bd3 he keeps in reserve the option of Nf3/Eg1 or Nge2/Eg1 and a quick g4. This would even be more effective if Black plays ...h6 as he does in this game.

6 ... h7-h6
7 Bg5-h4 0-0/Ee8
8 c4xd5 e6xd5
9 Bf1-d3 c7-c6
10 0-0/Ee1 Nf6-e4



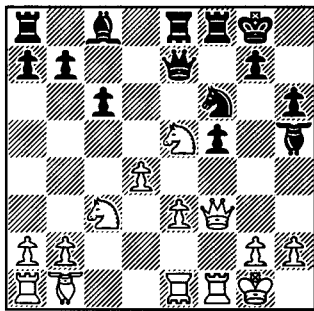
11 Bh4xe7

In a simul, it is natural to try to keep things simple, especially when there are many other games to consider and the opponents on this board were among the most dangerous. Still this exchange considerably eases Black's defense and he now is able to drop his Hawk right into the thick of things. It probably was better to avoid the exchange of bishops and instead play 11 Bg3. If Black now tries to anchor his knight in on e4 with 11...f5, his position would come under considerable pressure after 12 Nd2 Ndf6 13 f3 Nxe3 14 hxe3 Be6/Hc8 15 g4 [15...fxg4?? 16 Bh7+ Kh8 or 16...f7 17 Hg6 mate!]. Black does better to avoid the weakening pawn move, 11...f5, although 11 Ndf6 12 Ne5 or 11...Nxe3 12 hxe3 Nf6 13 Ne5 are not entirely comfortable either, but such is life in the classical QGD.

11 ... Qd8xe7/Hd8
12 Bd3xe4 d5xe4
13 Nf3-d2 f7-f5
14 f2-f3 e4xf3
15 Qd1xf3 Nf7-f6
16 Nd2-c4 Hd8-f7
17 Nc4-e5 Hf7-h5

Up to this point, White has been building up his position in quite a commendable fashion. His knight on e5 is strongly posted and Black has a number of weak squares, especially

the white colour complex around his king. However, the long dormant Black Hawk enters the fray in full force and is able to show off his ability to harass even her most royal majesty. Bruce Harper liked this natural move and even gave it an exclamation point in his account of the Vancouver simul on the Internet. Against White's next meek retreat it works out quite well, but if White had thought less materialistically, things might have gone differently.



18 Qf3-f2?

Now White's queen is in fact "dominated" as Harper states in his notes. White however should have taken advantage of the fact that the Queen really is not that much more valuable than the hawk and that Black's hawk was playing an important function covering the weak white squares around Black's king.

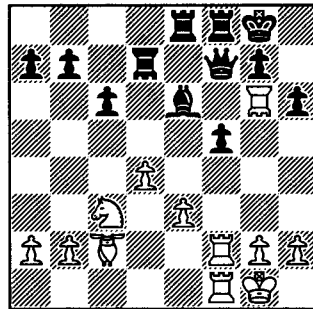
Instead of the text move, White can maintain some advantage by exchanging his Queen for the Hawk and then play to win the exchange. After 18 Qxh5 Nxh5 19 Ng6 Qg5 20 Nxf8 Exe3 21 Hd2 Exe1 22 Hc4+ Kxf8 23 Raxel, White does well against both 23...Bd6 24 Hd6+ and 25 He7+ and 23...Qd8 24 He5 where in both cases the point g6 is very vulnerable. Black can play better by ignoring the e3 pawn and things are more complicated after 20...Exf8 21 Hd2 [21 e4 while tempting is a little dodgy and Black can make a mess of things with 21...f4 followed by ...Bg4.] 21...Nf6 [This retreat seems necessary. Black has problems with the Nh5 and Qg5 with White threatening to do a little dominating himself with Hf3.] 22 Hf3 Qg6 23 He5 Qe8 24 Ef3.

- 18 ... Nf6-g4
- 19 Ne5xg4 Hh5xg4

20 Hb1-c2

Now in order to avoid losing his center pawns, White exchanges his queen for the Black Hawk under far less favorable circumstances.

- 20 ... Hg4xf2
- 21 Rf1xf2 Bc8-e6
- 22 Ee1-f3 Ee8-f6
- 23 Ef3-e5 Ra8-e8
- 24 Ra1-f1 Ef6-d7
- 25 Ee5-g6 Qe7-f7

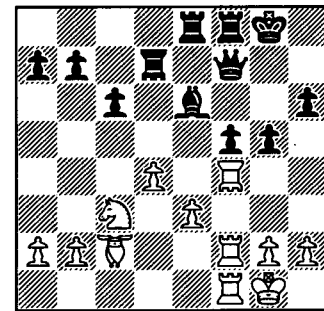


26 Eg6-f4?

White can still maintain pressure against the f5 point with 26 Eg3 and that seems to be a better retreat than the move chosen in the game. If now 26...Bc4 27 Ne2 is a reasonable reply and Black still has to come up with a good way to defend his f5 pawn. 27...Bxe2 28 Exe2 g6 29 g4 does not quite do the trick and meekly retreating with 27...Be6 28 Nf4 again exposes that soft spot on g6. Black probably should eschew trying to disrupt the rooks with ...Bc4 and tend to his wayward waif. However after 27...g6 28 e4 Bc4 [This also allows a dangerous exchange sacrifice but seems superior to 28...Kh7 when 29 exf5 gxf5 30 Rxf5 gxf5 31 Rxf5 Qxf5 32 Exf5! is just crushing.] 29 exf5 Bxf1 30 Rxf1 g5 31 f6 [Now it is very hard for Black to stop the Elephant from taking his pawn on h6 in a couple of moves when Black's castled position would collapse. He probably would have to offer to exchange his Queen for the Hawk with 31...Qh7 to defend against this threat. After 32 Hxh7+ both 32...Exh7 or 32...Kxh6 33 Ne4 give White a lot of compensation for his exchange. Considering these variations Black may have to settle for 27...Bxa2 28 Hxf5 [White can also contemplate the more complicated 28 Rxf5 Qe6 29 Ne4 keeping the game very much

more lively!] 28...Qxf5 29 Rxf5 Rxf5 30 Exf5 Bc4 resulting in more or less an even game.

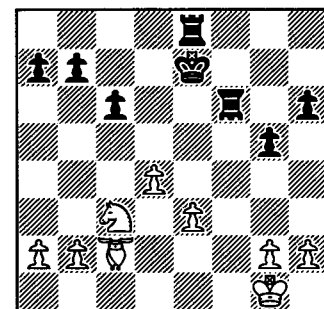
26 ... g7-g5



27 Ef4-e2

It is hard to say whether this is the move of a tired simul giver or a deliberate invitation to the following complications. White may have feared putting the Elephant on the same diagonal as the bishop on e6, but after 27 Eh3 Kg7 28 Eg3 White does have the pawn breaks e4 and h4 readily available and again 28...Bc4 29 Rxf5! Bxf1 30 Rxf7+ Exf7 31 Eh5+ Kg8 32 Hb3 does not look entirely satisfactory. In this line, Black would probably have to settle for a draw with 32...Kh7 33 Hc2+ Kg8, etc. Black needs to look for an improvement earlier and 27...Qg7 keeps the game going although Black will still need to be on the alert for possible sacrifices on f5 after 28 Eg3. White can also consider 28 Eh5 Qg6 29 g4, but whether he has enough compensation for his ruined pawn structure after 29...Qxh5 30 gxh5 is debatable.

- 27 ... Be6-c4
- 28 Rf2xf5 Bc4xe2
- 29 Rf5xf7 Rf8xf7
- 30 Rf1xf7 Kg8xf7
- 31 Nc3xe2 Ed7-f6
- 32 Ne2-c3 Kf7-e7!?



This position is not as easy as it

looks, and despite what looks like an overwhelming advantage in material**, Black has certain problems to overcome. With Black's king-side pawns far advanced, his King is rather exposed. The move chosen in the game hopes to solve that problem by moving the King to the greener pastures on the queen-side where there is still an intact pawn screen. Black's other problem is that he is unable to prevent a White e4 after which White's center passer can become quite threatening. Still Black probably should have emphasized coordinating his Elephant and Rook over a long winded King march to the Queen-side and 32...Kg7 would have been a better way of coordinating his two heavy pieces. After 33 e4 Rf8 34 He3 Ef4, Black threatens the unpleasant jump ...Ed3. If White now captures the Elephant the resulting Exchange down ending is not good for him and continuing a complex fight with 35 Hc4 b5 [Black too might keep the game complicated and 35...Ef2 may even be stronger.] 36 He5+ Kh7 does not look possible because of the threat to invade on f1. Because of that invasion White would still have to enter that exchange down ending. However with the Black King on h7 and having provoked the advance of Black's queen-side pawns this might be slightly more favorable than the similar ending on move 35.

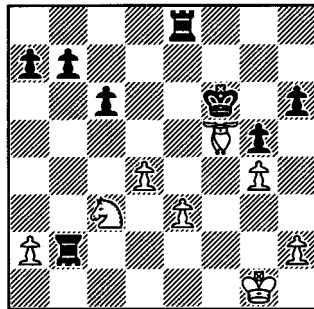
- 33 Nc3-e4 Ef6-d5
- 34 Ne4-c3 Ed5-b6
- 35 Hc2-f5+

Bruce Harper thought that 35 b3 or

** In breaking down the component parts of the complex pieces some might even assume here that Black is up two exchanges. However simple addition is not enough to explain the powers of the Hawk and the Elephant. Adding a Knight's move to a Bishop, which allows it to have access to both colour complexes of a chess board is a much more useful enhancement than adding the Knight's power to a Rook. Consequently this ability of the Hawk to have access to both diagonals almost equalizes the diagonal strong Hawk with the orthogonal potent Elephant and why the two pieces are almost roughly equivalent in value.

35 Na4 were better tries. However, there is nothing wrong with the active defense that White offers and if it had been followed up properly, it would have posed enough problems to save the game.

- 35 ... Ke7-f6
- 36 g2-g4 Eb6xb2



It is hard to turn down such a juicy morsel. However, White does have a shot after which he could have made things much more complicated.

- 37 Nc3-e4+ Re8xe4
- 38 Hf5xe4+

What was that I said about the rarity of pure Hawk and Elephant endings?

- 38 ... Kf6-e6
- 39 He4-c5+

After this move, White's checks will soon run out. White could have better exploited the loose position of the Elephant on b2 with 39 d5+!?. If now 39...cxd5, it is hard to avoid the perpetual check without losing all the king-side pawns. For example 40. Hf5+ Kf7 [The dangling Elephant is a problem. If 40...Kf6 or 40...e5 then 41 Hd4+ forking the king and the Elephant wins.] 41 Hxh6+ Kf6 42 Hg8+ Ke5 43 Hf7+ Ke4 44 Hxg5+ Kd3 45 Hf4+ Kc2. Now White cannot play 46 Hxd5 because of 46...Ed1+, but a win for Black is quite problematical after 46 g5. The White king-side pawns are very fast! Black does not have to accept the proffered pawn sacrifice and could instead try 39...Kf7. White loses after 40 dxc6 bxc6 41 Hxc6 Ee2+ 42 K~ Ec1+, and no better is 40 d6 Ee2+ 41 Kh1 Exe3 42 Hc5 Ed5 43 d7!? when 43...b6 dashes the last cheapo attempt. However, the simple check 40 Hd6+ keeps White in the game, and Black cannot escape the checks after 40...Kg8 or g6 41 He7+ Kg7 42 Hf5+.

- 39 ... Ke6-f7!

Care is required even to the end of a chess game. Bruce Harper mentioned that "the intended 39...Kd5? 40 e4+ Kc4 loses to 41 Ha3! Kc3 42 Hxb2 Kxb2 43 e5 and White's e5 pawn queens (or elephants or hawks...)." 40 Resigns.

Correspondence chess is an ideal format for chess variants. In these days of multi-million game chess databases and Grandmaster level chess engines, playing variants by mail or email is one last bastion where one can still do one's own thinking. This game is not quite as dramatic as the simul game. After a few too many quiet moves in the opening, I was able to seize the initiative from my opponent and convert this initiative into a decisive material advantage after further inaccuracies.

Played by Chess.com Discussion Board Posting 2009. White "Bobby Noblitt", Black "Panzerschiff" (John Vehre).

One thing about playing on the Internet is that you never know who you are truly playing. I am not sure if "Bobby Noblitt" is a handle or my opponent's actual name. When I use a handle on the Internet, I usually play under "Panzerschiff". I have liked naval history since I was a young man and while there is little that was admirable in the Nazi regime, the Panzerschiffe or "pocket battleships" used by the Germans in World War II, were actually an idea that originated in the Weimar Republic.

- 1 c2-c4 e7-e5
- 2 Nb1-c3/Hb1 Ng8-f6
- 3 Ng1-f3 Nb8-c6
- 4 d2-d4

One advantage of Seirawan Chess over other "Capablanca style" variants on large boards is that many classical chess openings are recognizable and can be played with basically the same ideas. 4. d4 can be played in this position in classical chess, but is a rather harmless system in the English Opening. Black there often can equalize play by threatening to devalue White's pawn structure with ...Bb4 and then ...Bxc3+ at the proper

moment. With the Hawk already deployed on b1, White can avoid the usual damage to his pawn structure and consequently this method of defense is not effective in Seirawan Chess.

In the English Four Knights, White often falls behind in development, in order to win the two bishops or have a more compact mass of pawns in the center. However, if he can play 4 d4 directly, as he does in this game, then he does not have to worry about such positional trifles. Instead White can develop much more smoothly and play directly for the initiative.

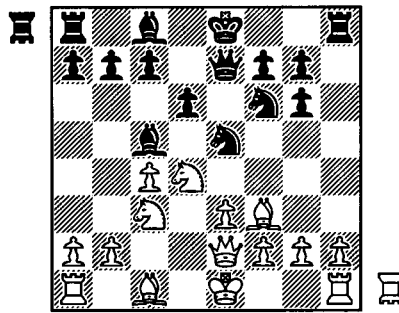
- 4 ... e5xd4
- 5 Nf3xd4 Bf8-c5/Hf8
- 6 e2-e3

This is not sufficiently aggressive and locking in the Queen's Bishop is not in the spirit of the more open games characterized by an early d4 in the English. By attacking the "presumptuous prelate", White can pose more problems for Black by playing 6 Nb3 Bb6 7 e4 d6 when he has the choice between the safe 8 Be2 and nursing a nice space advantage or speculating with a pawn sacrifice and play directly for attack with 8 c5!? dxc5 9 Qxd8/Ed1+ Nxd8 10 Bg5.

- 6 ... d7-d6
- 7 Bf1-e2 Hf8-g6
- 8 Hb1xg6?

This too is a little obliging and probably should be considered an outright mistake. Black is still cramped and would not mind a few exchanges. Exchanging here only helps relieve that cramped position, while opening the h-file for Black at the same time cannot be a good thing. This open file is especially dangerous here since Black's Elephant has not been deployed. Until Black's Elephant enters the game, White will have to be constantly on his guard for ...Rhx2/Eh8 possibilities. This makes castling short a rather dicey thing. White should have played 8 0-0/Ee1 and only make the exchange on g6 if Black follows suite with 8...0-0/Ee8. However even in that situation, I think I still would have preferred to make Black exchange the hawks, if that was really his desire, and instead would have continued with a more aggressive move like 9 f4.

- 8 ... h7xg6
- 9 Be2-f3 Nf6-e5
- 10 Qd1-e2 Qd8-e7



Black invites the knight sortie to d5, which White probably correctly declines. After 11 Nd5 Nxd5 12 Bxd5 [Ugly is 12 cxd5?! Bxd4 13 exd4 Nxf3+ 14 gxf3 Qxe2+ and if White does not want to lose a pawn then he has to play 15 Kxe2, when 15...0-0/Ee8+ looks very good for Black. 15 Kxe2/Ee1 might be the lesser evil and if 15...Rhx2/Eh8 at least both kings will have to take a walk after 16 Kd3+.] 12...c6 13 Be4 Bd4 14 exd4 Nc4!? 15 Qxc4 [15 0-0/Ee1 is more critical, and Black has to be careful. If 15...Rhx2/Eh8?? 16 Bxc6+! draws down the curtains. 15...Be6 is necessary and Black can answer 16 d5 cxd5 17 Bxd5 with 17...Rhx2/Eh8 and the otherwise desirable 18 g3 now fails to 18...Eh3 mate! 16 Bf4 instead does retain certain chances for the pawn. White still has d5 as well as Bxg6 as possible threats.] 15...Qxe4+ 16 Kd1/Ee1 0-0/Ee8 17 Exe4 Exe4. Black has the advantage and while the Elephant and pawn are more than enough material for the Queen, more important for this evaluation are the relative positions of the Kings. White's King cannot be particularly comfortable on d1.

- 11 0-0/Eh1 Rh8-h4/Eh8
- 12 g2-g3

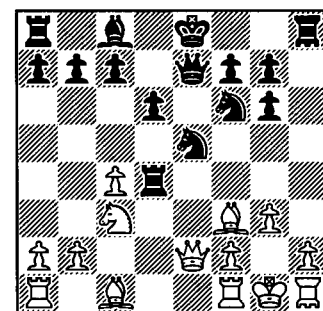
This move forces me to make the combination that I wanted to play anyway. 12 Rd1 would have kept Black's advantage to a minimum. I then intended 12...g5 [I also examined the tempting 12...Bg4, but did not see more than a draw after 13 Bxg4 Nfxg4 14 Nd5 Rxh2 15 Exh2 Exh2 16 Nxe7 Kxe7 17 Nf3 Nxf3+ 18 gxf3

Eh3+, etc.] 13 g3 g4 when 14 Bg2 seems safest for White. Black then has a clear advantage after 14...Rh5 because of influence he exerts on the white squares around White's king, the poor placement of the Elephant on h1, and the not inconsiderable pressure on the h-file. Still White has avoided an immediate debacle. White again should not be greedy and chase after the exchange. By means of 14 gxf4 he can grab the material, but would subject himself to a terrible attack. After 14...gf3 14 Qc2 [14 Nf3 Bg4] 14...Exh4 15 Eg3 Nh5 16 Ee4 [16 Nf5? Nxxg3 17 Nxe7 Eh3 mate] 16...Bh3 17 Nd5 Bg2 18 Exh4 Qxh4 and ...Ng4 soon to follow, White is defenseless.

- 12 ... Bc5xd4!
- 13 e3xd4

Black now wins at least a pawn, but capturing the exchange again was too dangerous. After 13 gxf4 Exh4 14 Bg2 Bxc3 15 bxc3 Be6 a pleasant fantasy was 16 Bb7? Bc4 17 Qc2 c6 where Black is already threatening mate in one. The counter attacking 16 Qb2, which avoids the skewering ...Bc4 also looks to be inadequate. With 16...Nf3+ 17 Bxf3 Ef3+ 18 Kg2 Bd5! 19 cxd5 Qe4 White will be mated. Finally if 16 Qd1 Black can at least win the exchange back with 16...Bxc4 17 Re1 Nd3. Still continuing to attack with 17...Ne4 or even 17...0-0-0 may even be better choices.

- 13 ... Rh4xd4



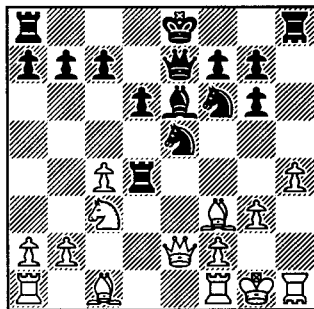
- 14 h2-h4

White admittedly does have a tough time defending his dangling waif on c4. 14 b3 loses a piece to 14...Rd3. The active move 14 Nd5 looks like a better try than this further weakening of the king-side. True White is butchered after 14...Nxd5 15 Bxd5?

Rxd5 16 cxd5 Bg4 17 Qb5+ c6 18 dxc6 Eh3+ 19 Kg2 Bf3+! 20 Kh3 Qe6 mating, but 15 cxd5 Nxf3+ 16 Qxf3 Bf5 17 Qc3 avoids an immediate loss. White can repel the borders after 17...Qe4 18 f3 Qe2 19 Ef2 while 17...Qxd5 18. Qxc7 Rc8 19 Re1+ Kf8 20 Qe7+ Kg8 21 Be3 has permitted White to get his pieces out of the box at cost of a mere pawn. Black probably does best to avoid going for an immediate knock out and should settle for the better position after 16...Rxd5 17 Qxg7 0-0-0 18 Be3 Kb8. With opposite colored bishops the side that first generates an attack should have the advantage. Considering that White's king-side, without his light squared bishop, is still a little airy, Black probably has the better chances in developing that attack.

14 ... Bc8-e6

Black of course could have safely just taken the second pawn say, with 14...Nxf3+ 15. Qxf3 Rxc4, but I wanted more.



15 Bf3xb7

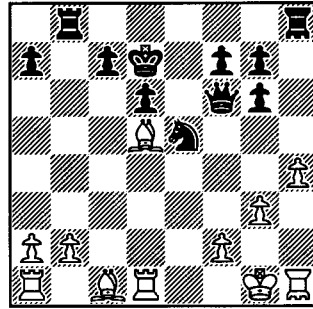
White agrees to entering this long winded combination, which eventually leads to Black winning a Queen and a pawn for a Rook and a piece. However it really is hard to recommend the two-pawn down position after 15 Nd5 Nxd5, etc. over White's actual choice in the game.

15 ... Be6xc4
16 Qe2-c2 Bc4-d3
17 Qc2-d1

17 Qb3 Rb8 18 Rd1 c6 does not earn commendations either. White might have ventured moving into a pin in the hope that Black might become over ambitious in refuting it. For instance 18...Ba6 19 Rxd4 Bxb7 was tempting, when ...Nf3+ looks winning. Still White can put the damper on that

with 20 Nd5 and the position is not so clear!

17 ... Bd3-e4
18 Nc3xe4 Rd4xd1
19 Ne4xf6+ Qe7xf6
20 Rf1xd1 Ra8-b8
21 Bb7-d5 Ke8-d7



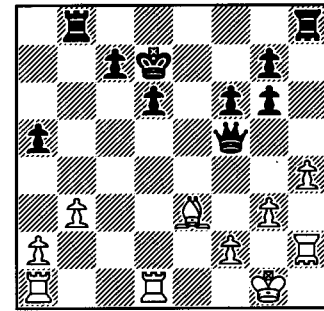
The dust has now settled and Black has won his material advantage, but at the cost of obtaining a slightly less secure king. Both sides still need to move their Elephants into play and Black's task to meet that goal probably is the easier. Still White's bishops make the realization of Black's advantage difficult.

22 Bc1-g5?

This is totally inconsistent with White's previous play. When he played 19 Nxf6+, it was to be able to keep his two bishops on the board. Now Black can exchange one of these bishops and the task of realizing the advantage now becomes much easier.

Instead of the move in the game, I thought 22 Be3 was a better try. If White can grab the a7 pawn, the resulting passed White a-pawn supported by the bishops could become dangerous. However, I have to admit that I was tempted by the flashy combination 22...Rxb2 23 Bxa7 c5 24 a4 g5!? 25 h5 Exh5 26 Exh5 Qxf2+ 27 Kh1 Nf3 mating, that would have allowed White that possibility, until I noticed 24 Rab1 when the invasion of the White rook to b7 would have saved White. Instead Black needs to hold onto his a-pawn and play 22...a5. Still after 23 Bb3, Black has his work cut out for him to score the full point.

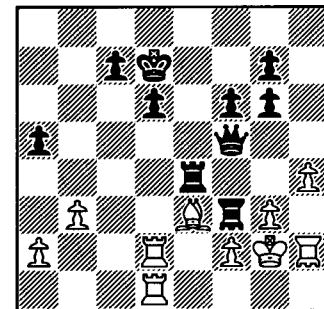
22 ... Ne5-f3+
23 Bd5xf3 Qf6xf3
24 Eh1-h2 Qf3-f5
25 b2-b3 f7-f6
26 Bg5-e3 a7-a5



27 Rd1-d4

27 Rd2 would have saved a tempo since White really cannot agree to the rook trade that Black soon offers on b4. After 27...Ee8 28 Rad1 Ee5 29 Bf4 Eg4 30 Ef3 [30 Rd5 Exh2 31 Rxf5 Ef3+ 32 Kg2 Ec3 33 Rfd5 Exa2 should lead to a win also.] 30...g5 Black should win, but White can definitely stir up trouble with 31 Rxd6+ cxd6 32. Rxd6+ Ke8 33 Ed4, but it does not look like enough trouble after 33...Qxf4.

27 ... Rb8-b4
28 Rd4-d2 Eh8-e8
29 Ra1-d1 Rb4-e4
30 Eh2-f1 Ee8-e5
31 Ef1-h2 Ee5-f3+
32 Kg1-g2



White could have prolonged, but not changed the result of the game by exchanging Elephants. I think he saw the concluding combination, but was gracious enough to permit the elegant finish that now wraps up the game quickly.

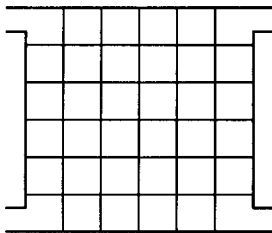
32 ... Re4xe3
33 f2xe3 Ef3xe3+
34 Kg2-g1 Ef3xg3+
35 Eh2-g2 Eg3-h3
mate.

I am reminded of Jonathan Levitt's remark on allowing a pretty mate in a lost position: "It's nice to see one's name in the anthologies!" - JDB

GHOSTS!

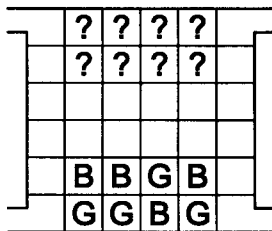
Nost-algia devoted a certain amount of space to non-chess games, and *Nost-algia* 329 (Jan/Feb 1992) carried an article on a game **Ghosts!** which had attracted a lot of interest at the NOST meeting the year before. I don't think it featured subsequently, but it appears to be well worth taking down and dusting off.

Ghosts! was invented by Alex Randolph, and is played on a 6x6 board with an exit at each corner:



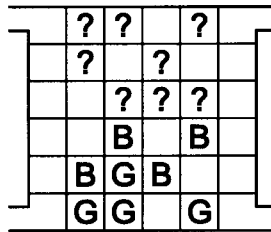
Each player has eight ghosts, four good and four bad, and he knows which is which but his opponent does not. Ghosts move one square laterally or vertically (not diagonally), and capture each other as in chess. You start by placing your men in the middle of your back two ranks, in whatever order you please, and you win by either (a) capturing all his good ghosts, or (b) persuading him to capture all your bad ghosts, or (c) moving one of your good ghosts out through one of the two exits at the far side of the board (bad ghosts cannot get through the exits).

Nost-algia 329 gave a sample game, with notes by John McCallion from the viewpoint of one of the players (he didn't say which he was, or even if he was involved at all). This player had first move, and set up his men as follows:



- 1 c2-c3 c5-c4
- 2 d2-c2 d5-d4
- 3 d1-d2 e5-e4

- 4 e2-e3 d6-d5



- 5 e3xe4 (B)

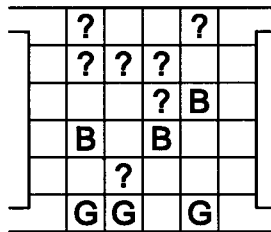
"Oh dear! But capturing the first bad ghost is no cause for panic."

- 5 ... c6-c5

- 6 d2-d3 c4xc3 (B)

"Evening it up."

- 7 b2-b3 c3xc2 (G)



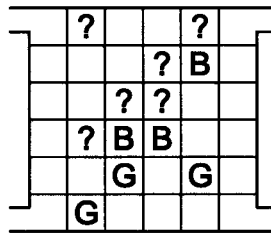
"Uncomfortable. One G is captured and the poor innocents on c1 and b1 are threatened. The intruder is probably a B, but must be captured."

- 8 c1xc2 (B) c5-c4

- 9 b3-c3 b5-b4

- 10 e1-e2 b4-b3

- 11 e4-e5!?



"Bold, but he must surely accept, since he cannot know that this is a B. If it were a good one, it would win by exiting via e6/f6 next moves."

- 11 ... b3-a3!!

"WHAT?! Only a fool or clairvoyant would have called the bluff! Now he has the advantage of knowing the whereabouts of one of my B's."

- 12 e5xe6 (B)

"Things look bleak. I have captured three of his B's but not a single G. Capturing the last B would lose the game. However, I have created a vacant corner and thus an exit for a G."

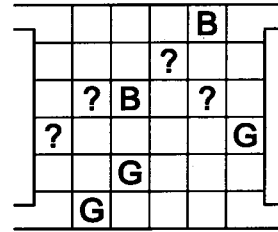
- 12 ... c4xc3 (B)

- 13 d3xc3 (G) b6-b5

- 14 e2-e3 b5-b4

- 15 e3-f3 d4-e4

- 16 c3-c4



- 16 ... b4-b3

"Notice how this piece has avoided my attack. It must be a G - unless he is bluffing..."

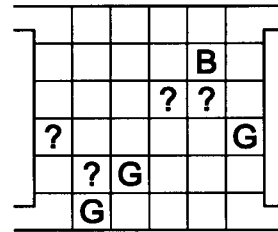
- 17 c4-d4?

"Played hastily and carelessly. Far better is 17 e6-e5, since he knows it is a bad spirit."

- 17 ... d5xd4 (B)

"Once more, material equality. However, my opponent has the enormous advantage of knowing where my B is, whereas I am still completely in the dark."

- 18 e6-e5 b3-b2



"Is the ghost at b2 good or bad?? Getting this right will win the game. If the ghost on b2 is a bad one, I can force a win by 19 b1-a1! b2-b1 20 e5xe4(G) - it **must** be good if b1 is a bad one - b1xa1(G) 21 f3-f4 a1-b1 22 f4-f5 and wins the race between f6 and a1. What, however, if the ghost on b2 is good (and the chances are three to one that it is)? Then, of course, I must capture immediately. It is very difficult, but as this piece dodged me so neatly when I played 16 c3-c4, I reckon it is a good one. Yes, I'll take it!"

- 19 c2xb2 (B)

"Curses!! It **was** his last B, so I have lost to the deceiving so-and-so!!"

The article in *Nost-algia* was written by Tracy Cobbs, who described

Ghosts! as “a simple game of movement and capture with a twist of bluffing and psychology”, a description amply borne out by the above sample. I am sure he is right in saying that a poker face and nerves of steel are priceless assets, but he offers some more detailed observations which also seem worthy of quotation.

1. “It is sound policy (as in the illustrative game) to place the bad spirits in front of the good ones, so it is probable – but far from certain! – that an opponent will have at least 3 B’s in the front row.”

2. “By observing the opponent’s moves, try to establish the location of at least one B, thus avoiding a loss by capturing all of those.”

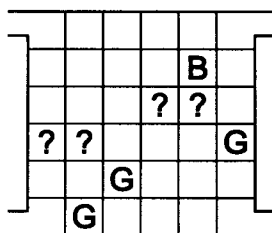
3. “Sometimes, sacrificing a G leads to a more accurate picture of the enemy forces.”

4. “It can be a useful tactic to post a B as a guard in a corner square. An opponent about to escape with a G may thus lose by capturing your last B!”

5. “Occupation of the center to limit the opponent’s freedom of movement is important, but strategies vary. Three or even four B’s have been known to smash through the center to clear an escape path for a G, but on the contrary, it might not be bad to use 4 G’s alone for a flank attack.”

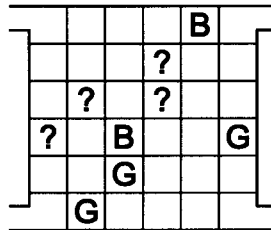
With the advantage of leisure, we can see how consideration of Black’s previous play (point 2 above) might have led White to the correct decision at move 19. Where might Black’s bad ghost now be?

Surely not on e4, because the position before Black’s last move was



and an invulnerable Be4 would have kept White’s Gf3 permanently at bay. So Black would have played ...d4-c4, ...a3-a2, ...c4-c3, and so on, winning very simply with no need for heroics.

On d4, perhaps? Again surely not, because the position before Black’s 15th move was



with this ghost on d5, and ...d5-e5 with this bad ghost would have been a much more natural and effective defensive move than the ...d4-e4 actually played.

And it can hardly have been on a3, because 11...b3-a3 was a move that made sense only if made by a good ghost (the supposed Bb3 was about to become Black’s last B, and its natural move would have been ...b3-b2 to create as much havoc as possible).

This leaves only the actual b2, this ghost having come down from b6 in a raid on the a1 corner. Black’s move to b2 was now a blunder (he had overlooked the possibility of b1-a1, and should have played ...a3-a2 first to prevent it just as White should have played it at an earlier stage), but it was a plausible blunder, whereas Black’s natural play under other assumptions would have been quite different.

Most plausibly, therefore, Black’s bad ghost is now on b2.

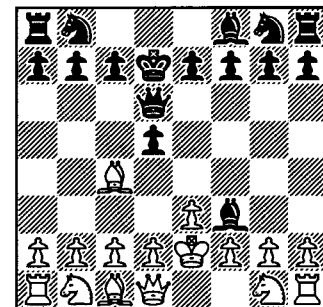
(And I have to question Black’s “clever” move 11. Even if the ghost on e5 is indeed bad, this move will cost him his bad ghost on e6, leaving him weak on the e and f files with his only remaining bad ghost far away on b6. In effect, he is staking everything on an attack on the a1 corner, and this attack should really have failed.)

Ghosts! strikes me as a brilliant little game, witty, amusing, and simple to play. It was brought out by Milton Bradley in the 1980s – I have seen ascriptions to both 1982 and 1985 – and was marketed in at least six languages. I do not know whether it is still in production, but if it is not it would seem well worth a revival. If any of our readers has access to a suitable ear, perhaps he or she could have a word in it.

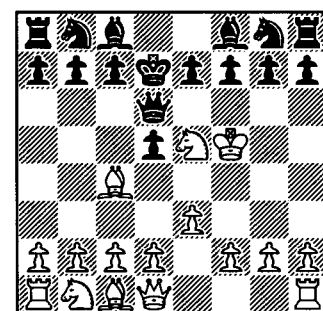
PROGRESSIVE CIRCE

Pierre Montréal’s *Circe*, in which a captured man is reborn on its game-array square (rook, bishop, or knight on the square of the same colour as the capture square, pawn on the same file) and is removed from the board only if this square is already occupied, was invented for use in problems, and I have always thought it intrinsically unsuitable for actual play. It has been tried and *Nost-algia* 262 gives a game score, but this seems to make the case against it rather than for it: 31 moves of turgid to and fro, Black blundering rook and knight and then resigning. However, **Progressive Circe** appears to be playable. The same issue of *Nost-algia* gives the score of a game won by Guido Gallozzi in 1982 :

- 1 e3
- 2 d5 Bd7
- 3 Bc4 Qf3 Ke2
- 4 Bg4 Qd6 Kd7 Bxf3(Qd1)+ ?



- 5 Kxf3(Bc8) Kg4 Kf5 Nf3 Ne5 :



The game was played under Italian rules, so this was mate (Black’s only check-relieving moves would have given check themselves and so were forbidden), but as nearly always seems to happen an ordinary mate next turn would have followed under traditional rules.

HNEFICHESS : THE KING'S KING'S GAME

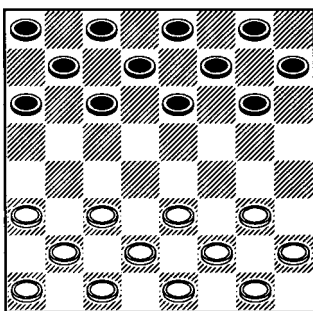
by Andrew Perkis

Andrew Perkis continues to have imaginative ideas, and to try them out with competent friends before submitting them for publication. The game that follows is a combination of hnefatafl and chess. In a separate article later on, Andrew gives some background, and describes how the game evolved. - JDB

Hnefichess is an obvious name-choice for a game which combines features of Chess and Hnefatafl. Nevertheless it's quite an odd name, since both Hnefi and Chess have the same meaning- "Hnefi" (fist) is the usual name for "King" in Old Icelandic and, of course, "Chess" derives from "Shah". "Hnefichess" can therefore be thought of as the "King's King's Game" - appropriate since both of these very different games are distinguished by the importance of a royal piece.

Rules

Play uses a standard chess board, and most convenient (unless you have pawns from two 'compatible' chess sets to hand) is to use a Draughts/Checkers set and two chess kings. Set up for play as shown below. All men at the outset are "soldiers" but the first man moved by each player becomes his king.



Throughout play all men remain on their 'playing squares', that is, White's men remain on black squares and Black's men remain on white squares.

White moves first, after which play alternates in the normal way.

Object

A player wins: (a) by capturing the enemy King; (b) by reaching his far row with his own King; (c) if his opponent is unable to move on his turn of play and his King is under assault (see below).

The game is drawn by repetition (usually by perpetual threat to move the King to the far row) or if a player is unable to move and his King is not under assault.

Moving : normal options

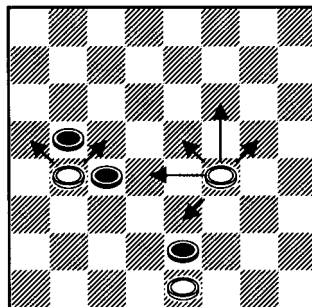
All men - soldiers and Kings - have the same move options, except under the special circumstances listed below.

These 'normal' options are: to move one space diagonally forward (a step); or to move directly forward, over an enemy square, to the player's next playing square. This move (a low leap) can only be made if the intervening square is unoccupied.

Capturing

Soldiers are captured by custodianship (sandwiching). This takes place when a player traps an enemy soldier between two of his own (not between a soldier and his King). When making a capture, a soldier may move by a step or a low leap. This may be forwards, backwards, or sideways.

Kings are captured by double custodianship, also known as enclosure, and the enemy King may be one of the enclosing pieces.



In the diagram above, the soldier on b4 can make a step move forward to a5 or c5. The soldier on f4 can make a step move forward to e5 or g5, or a low leap forward to f6; additionally, it can make a low leap sideways to d4

and capture the enemy soldier on c4, or a step move backwards to e3 and capture the enemy soldier on e2.

As is usual in games with custodian capture, a man may move into a 'sandwich' with impunity.

Contact moves : first phase of play

A contact move is one which brings any man (soldier or King) adjacent to the enemy King. During the first phase of play, any man (soldier or King) may make a step move or low leap in any direction in order to achieve this. Sideways and backwards moves, however, cannot be made on the strength of retaining contact with the enemy King, only when initially making contact.

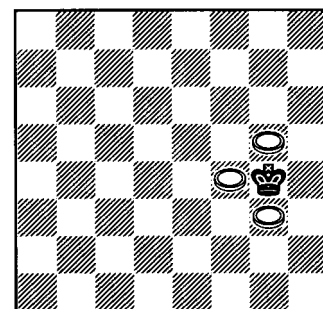
Options for a King under assault

A King, when any enemy man is in contact with it, is normally not free to make a step move. A King thus assaulted may normally make only low leaps, although these may be in any direction.

A King under assault may move diagonally in one circumstance only, if by doing so it makes contact with the enemy King - but a King, once adjacent to the enemy King, may not move diagonally.

Capture of the opposing King

Capture of the opposing King is achieved by double custodianship, that is, surrounding it by men placed on all on four sides, or on three sides if the King is on the edge of the board. A King on its home-row corner - not a wise or likely place to move it! - would be vulnerable to capture by just two opposing men.



A King may also be 'trapped', as shown above. The King here is not captured but is unable to move. The

trapped player would lose the game if unable to move any soldiers either.

Contact moves : second phase of play

An attainment move is a move by a soldier to its far row. After two such moves have been made (one by each player or two by one player) the game enters a second phase. From this moment on contact moves may not be made if they involve moving a man backwards. Backward moves to capture are still allowed, including the capture of the enemy King.

Clearing the far row

As soon as a move results in all the playing squares on a player's far row being occupied, the four pieces involved are all removed from the board.

Two Annotated Games

A new game does need a lot of play before its depth and character really become clear. Rather than make any claims for the game at this stage, I'll present these two games, played by email - but at speed! Dan and I both enjoyed them a lot.

A.P. v Dan Troyka, March 2010

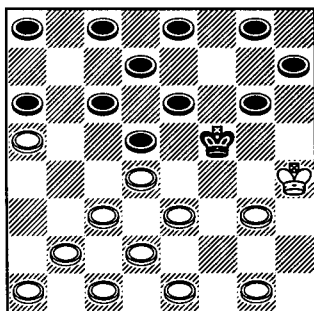
1 h2-h4 (K)

I thought developing the King on this wing - away from the action - might be a safe option. The game seems to show that this is a bad square for the King, from which I am soon forced to withdraw.

1 ... f7-f5 (K)

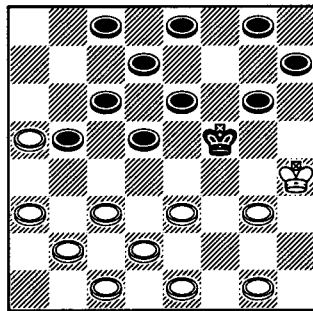
Good enough, though d3-d5(K) may be better as Kf4 just might now become an option for White in some continuations.

2 e3-d4 c6-d5
3 f2-e3 b7-c6
4 a3-a5



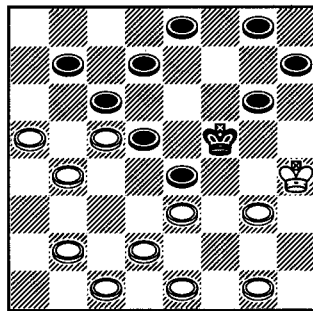
Double edged. The soldier is strong here - but can be 'sidelined' later in the game (forced to advance to a7 where it may become of little relevance to the main sphere of action).

4 ... a8-b7
5 a1-a3 b7-b5
6 d4-c5xb5 a6-b5xc5



Setting up for later threats to sideline a5.

7 a3-b4 c8-b7
8 c3-c5xb5 e6-e4!?



Keeping an eye on both wings. White now has no way to hang on to his material plus. 8 ...g6-g4 was a good alternative.

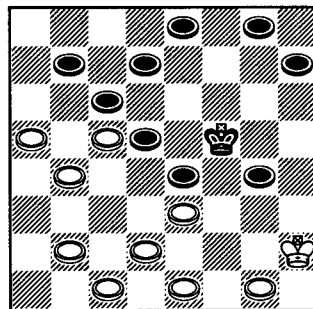
9 g3-f4?

Kf4 was almost certainly better here.

9 ... g6-g4xf4

10 Kh4-h2

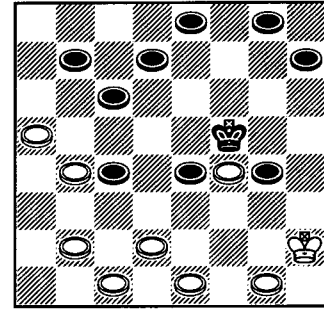
Forced, due to the threat of ...g4-h3.



10 ... d5-c4xc5

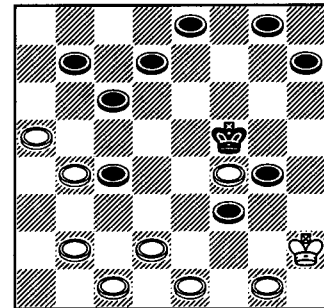
Stronger than 10...e4-c4xc5 when Black cannot regain the e4 outpost. Not 10...g4-h3 11 Kf2 Kf3? 12 g1-g3 and after 12...h3-g2 13 e3-f4 Black is in a mating net. This is the trap that stupidly distracted me on my 9th move.

11 e3-f4



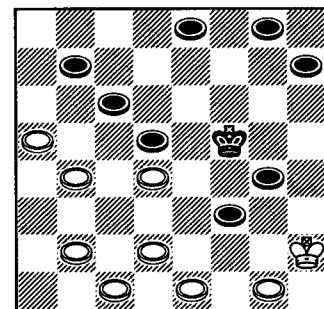
Threatening a double capture with d2-d4xc4xe4 and tempting Black's reply.

11 ... e4-f3!?



Is this advanced soldier a strength or a weakness? It will play an important role in Black's game, probably because I did not treat it with sufficient respect!

12 f4-d4xc4 d7-d5



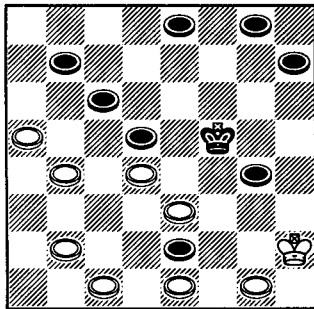
13 d2-e3?!

Not 13 d4-e5, when 13...Kh5 with the double threat of Kh3 and g4-f5xe5.

13 ... f3-e2

Stronger than I had anticipated. A

salient aspect of the tactics which follow is the constraint upon White to prevent a strong ...Kf3.

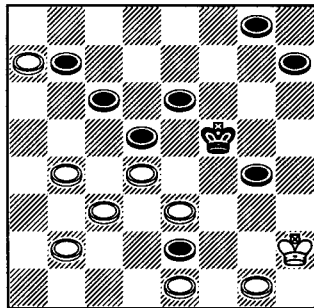


14 c1-c3 e8-e6

After 14...Kf3, 15 Kf2 and Black is in trouble and will need to retreat.

15 a5-a7

From now on this soldier is in danger of becoming irrelevant - but Black seems to have a tactical answer to anything else I can attempt. I wanted to play 15 Kg3 intending Kf4, but 15...e2-d3(x) 16 e3-d4 d3-f3 gives Black a winning attack.



15 ... h7-h5

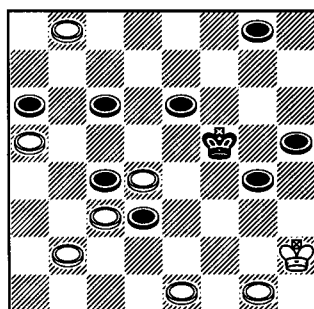
There were many alternatives, but this keeps up a nasty pressure on the White King.

16 a7-b8 b7-a6

17 b4-a5 e2-d3xd4

The start of complications. At first I thought Dan's intention was merely to avoid loss of material ...

18 e3-d4 d5-c4!



A good move, aimed at reducing material, so I will be without resources to challenge the advance of the Black King.

19 a5-b4xc4

There were 11 possible recapturing moves! I really do not want to allow e6-e4xd4 and therefore I must either capture c4 or play d4-e3xd3. The latter may be playable but after 19...c4-a4xa5 20 c3-d4 a6-b5 21 b2-c3 b5-b3, for example, the b8 soldier has no further role, whereas all Black's soldiers are active (even the a4 soldier plays a role in relevant variations). The pros and cons of the alternative captures on c4 are hard to assess. The chosen move was intended to keep the maximum force possible preserved against the Black King.

19 ... e6-d5xd4

19...c6-d5xd4 was an alternative.

20 e1-e3xd3 d5-d3

21 e3-e5

This would not have been playable after 19...c6-d5xd4 20 e1-e3xd3 d5-d3, but it only enables me to prolong the agony.

21 ... d3-e2

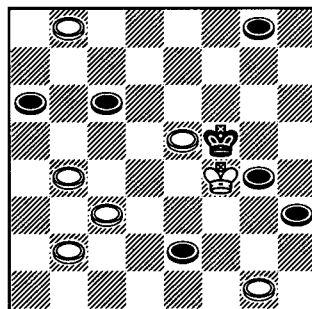
22 Kh2-g3

At last...

22 ... h5-h3

23 Kg3-f4

I get to where I wanted to go, but it's already too late.



23 ... a6-a4!

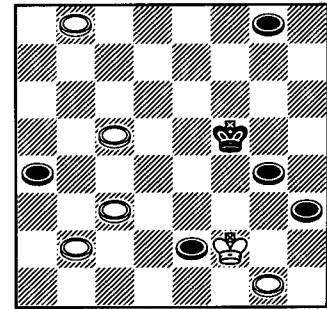
Very strong. White's last hope was 23...h3-f3, which looks dangerous but after 24 Kd4 g8-f7 25 b4-c5 f3-g2 (nothing better) 26 g1-f2 e2-d1 27 Kd6 f7-d7 28 e5-e7 White wins.

24 Kf4-f2

I am already in zugzwang and bound to lose material.

24 ... c6-c4xb4

25 e5-c5xc4



25 ... Kf5-f3

Decisive. The last chance to go wrong was to win a piece with 25...e2-f1, which loses the game. After 26 Kf4! Black would have no adequate defence to the threat of 27 c5-e5 followed by Kd4, since the forward path for his own King is blocked at f1.

26 c3-d4 h3-h1

27 Resigns

I really got a good battering after my not-very-good ninth move!

Second game. Dan Troyka v A.P., March 2010.

1 d2-d4 (K) d7-d5 (K)

This turns out to be a far more interesting opening.

2 f2-f4

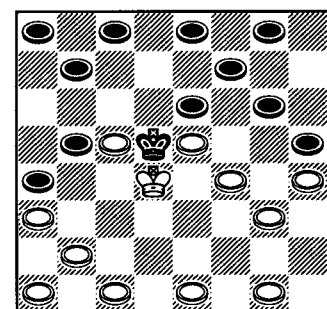
If 2 a3-a5, my best option was probably 2...f7-f5 with e6-e4 to follow.

2 ... a6-a4

3 e3-e5 c6-b5

4 h2-h4 h7-h5

5 c3-c5



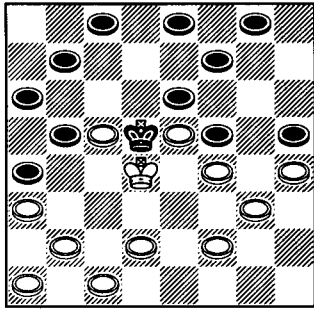
5 ... b7-a6

Not 5...b7-c6?? 6 e5-d6 and wins next move. It seems wise either to play expansive opening moves (if one can do so safely) or to avoid playing 'faster' than one's opponent (by frequently sticking to step moves) or maybe to mix the two. The aim in both cases is to have more moves in hand against future zugzwang threats. Here White has played more ex-

pensively, but Black's sole advanced soldier (at a4), combined with that at b5, has a significant cramping effect.

- 6 e1-d2 a8-b7
7 g1-f2 g6-f5

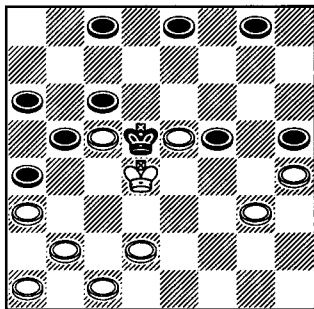
I began to fear for the safety of my King if I didn't force some exchanges!



- 8 g3-g5xf5 f7-f5xg5
9 f4-g5xf5

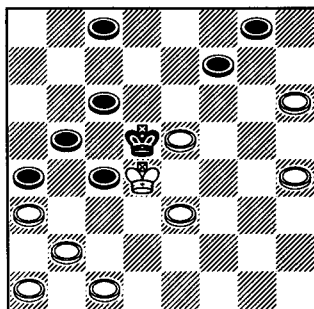
I had expected h4-g5xf5, an attempt to sideline h5. This is probably stronger.

- 9 ... e6-f5xg5
10 f2-g3 b7-c6



I have to lose a soldier, but White will be very cramped on this wing.

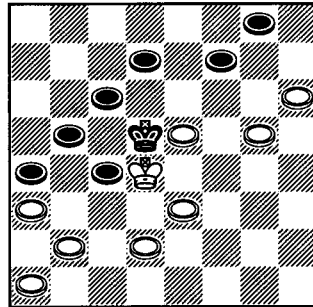
- 11 g3-g5xf5 a4-c4xc5
12 g5-h6xh5 e8-f7
13 d2-e3 a6-a4



White will now find development of his a-wing difficult. As a consequence I have better chances to attack Dan's King than vice versa. The position is very hard to assess with lots of mini

zugzwangs pending. All in all, Dan's extra soldier should give him an advantage, possibly a winning one, but at the time I felt fairly comfortable due to the danger to Dan's King. He certainly needs to be careful!

- 14 h4-g5 c8-d7
15 c1-d2!



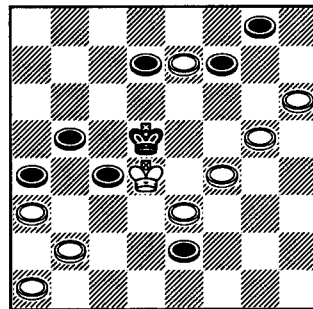
Dan decides to take the plunge, and - despite my obvious reply - to start to develop this wing.

- 15 ... c4-c2
16 e3-f4 c2-d3
17 d2-e3 d3-e2

Safe from attack and within range of the Black King.

- 18 e5-e7 c6-c4

18...d7-e6 would allow 19 g5-e5xe6 with advantage (but not 19 e3-e5xe6 f7-e6! or 19 f4-e5xe6 f7-f5!).



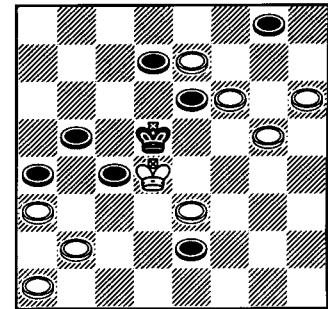
- 19 f4-f6?

An aggressive looking move which, incredibly, seems to lose. I think White's best move was 19 e7-d6, and if 19...d7-c6, then 20 d6-c7. This improves White's clearance chances (since he can get to b8) and c7-c5 may become a threat in some lines. (White having more material, Black will run out of soldier moves first and will have to move his King, letting White advance his, but White cannot get his King to the far row without clearing it first and so he must get a soldier to b8.) If 19...f7-e6 (possibly

best) then 20 h6-f6xe6 d7-e6 21 f4-e5 with advantage. Dan would, I think, clearly be winning.

- 19 ... f7-e6!

Threatening the devastating 19...e6-e4xe3. After a long time looking at each of White's replies, I came to the conclusion that I was no longer in danger of losing.



- 20 g5-e5xe6?!

Here are the alternatives:

(i) 20 e3-e5xe6 e2-e4! starts a winning King hunt.

(ii) 20 e7-d6xe6 d7-e6 also with a winning attack.

(iii) 20 f6-e5xe6 (looks best) d7-e6! 21 g5-g7 (perhaps there is a better move but I haven't found it) e6-g6xg7 22 e7-f6xg6 g8-g6! and Black should win, though a full demonstration would require a hefty amount of analysis.

- 20 ... g8-g6

I am now two soldiers down but with a winning attack. The recapture 20...g8-f7xe7 would be losing after 21 h6-g7.

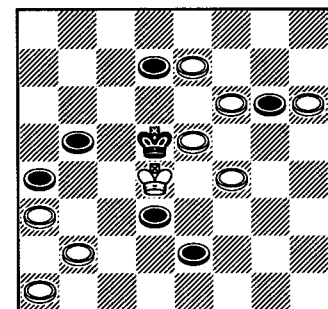
- 21 e3-f4

Nothing else seems better.

- 21 ... c4-d3

Quickest.

- 22 Resigns



Another absorbing game. There is no doubt that I was let off the hook at the end!

HOSTAGEMASTER

reviewed by Peter Coast

John Leslie, the inventor of Hostage Chess, has a website (www.hostage.com) which allows the user to download the program HostageMaster, written by Paul Connors, free of charge. Peter Coast is probably the best of our British Hostage players, and I have asked him to review it for us.

A brief reminder of the rules. Each player has a prison to his right and an airfield to his left. A captured man is put in prison, and when its owner has a man of equal or higher value in his own prison ($Q > R > B = N > P$) he can make an exchange and recover it. The man recovered must be dropped back into play at once; the man given in exchange goes to its owner's airfield, and can be parachuted into play when its owner wishes. - JDB

First of all I need to comment on technical aspects of the program. It requires a Microsoft facility called .NET which, I understand, is a standard part of VISTA. My computer is an antique (running XP) and I had to download it: I had some difficulty but this was probably my fault. The download of HostageMaster itself, however, went very smoothly.

I found HostageMaster easy to use. The display is good, and the facilities are straight-forward to use and helpfully described. There are a couple of awkwardnesses, however. It is not possible to get a score of a game (surprising, since the program remembers the game as can be seen by retracting moves back to the initial position). Secondly, there is an indication (a red square) of which player is to move next. It would be helpful, in the case that the computer is to play next, to have the square "blink". One would then be reassured that something can be expected to happen, and distinguish that from the mode of play that allows the user to provide all the moves.

How well does HostageMaster play? Before addressing my own experience, it is important to discuss what expectations are reasonable. I feel that our level of play of most of the chess variants (including Hostage) is primitive. We have not played enough to know what constitutes good strategic play, and are on a steep learning curve. Because of this we do not have a codified body of knowledge that can be used to make a computer program stronger. In the case of Hostage normal chess strategy is inapplicable: pawn structures are not fixed, and manouvering to get one's pieces into the right position is much easier. A computer can, of course, calculate many possibilities: it can, however, only "see" a few moves ahead and then has to evaluate the resulting position in order to decide which move is best. A poor evaluation will result in poor play. We lack the knowledge, however, to make good evaluations! In addition, if each side has even one piece drop available, to extend the look-ahead by one whole move multiplies the time taken by typically 4000 (30 or so ordinary moves plus at least 32 drops, and the same in reply). There will, therefore, always be practical limitations

on the number of moves ahead the computer can "see". We cannot expect HostageMaster to be another Fritz!

I have reason to believe that my computer runs at least 2-3 times more slowly than John Leslie's. I do not think that this makes a huge difference at the strongest level of HostageMaster play, because extending the look-ahead is so expensive for the computer. I find that I can win comfortably against the program, even when I am taking less time than its 5 minutes (the maximum available). This does not mean that I claim to have everything under control: I am often surprised by its play. It does, after all, examine all possibilities! It is more exciting at "blitz" play, when one's own play is weaker.

The program's opening play is particularly poor: 1 d4 e5 is unlikely to be the best of gambits! It tends to neglect development, and is too easily tempted by checks and captures. Fortunately the opening in Hostage is of less long-term importance than in chess, but that relies on surviving long enough. If this is irritating it is easy enough to start a game from some standard position.

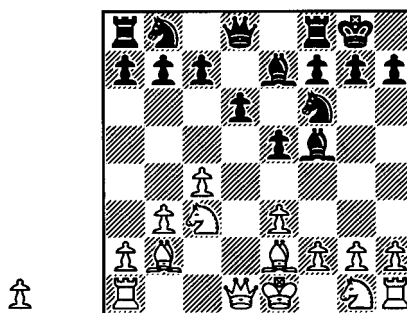
To summarise, therefore, I believe that the program plays weakly, but must be treated with respect. This is much as I expected for the reasons given above. I can see the program being most useful for beginners to get a feel for playing Hostage, or for more experienced players at "blitz" time rates.

To clarify some of the above points, I offer the following game. HostageMaster plays White, at 5 minutes a move. I took much less most of the time.

1	c2-c4	Ng8-f6
2	b2-b3	e7-e5
3	Bc1-b2	d7-d6
4	d2-d4	e5xd4
5	Bb2xd4	(P~P) P@e5
6	Bd4-b2	

White has lost a move and gained a pawn drop. Probably a fair exchange.

6	...	Bf8-e7
7	e2-e3	0-0
8	Nb1-c3	Bc8-f5
9	Bf1-e2	

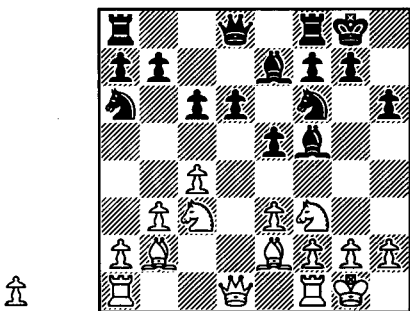


9	...	h7-h6
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I had several reasons for this move. I did not want a pawn drop on g5, blocking h6 prevents a future attack starting with a N check there, my K has a bit of air and I want to keep my B (f5) on the b1-h7 diagonal. This sort of

reasoning, natural for a human player, is not available to the computer.

- 10 Ng1-f3 Nb8-a6
- 11 0-0 c7-c6



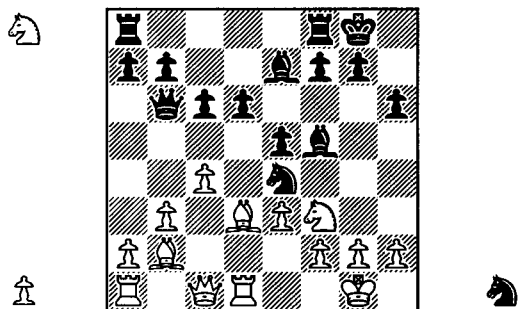
- 12 Qd1-d2

This does not look good because the Q is an easy target for my Ns.

- 12 ... Na6-c5
- 13 Rf1-d1

The wrong rook!

- 13 ... Nc5-e4
- 14 Nc3xe4 Nf6xe4
- 15 Qd2-c1 Qd8-b6
- 16 Be2-d3



- 16 ... Ra8-d8

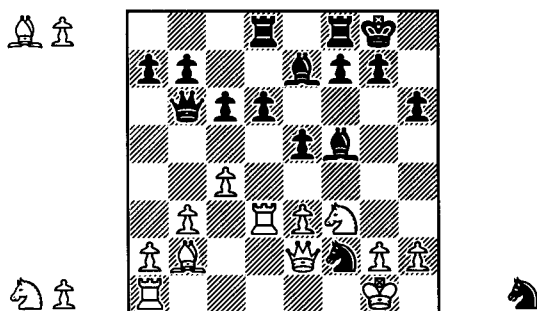
I played this partly to prevent a future N drop on d7.

- 17 Qc1-c2

I cannot imagine many players even considering this move, which only helps Black.

- 17 ... (N~N) N@b4
- 18 Qc2-e2 Nb4xd3
- 19 Rd1xd3 Ne4xf2

I played this without much thought - it seems obviously strong.



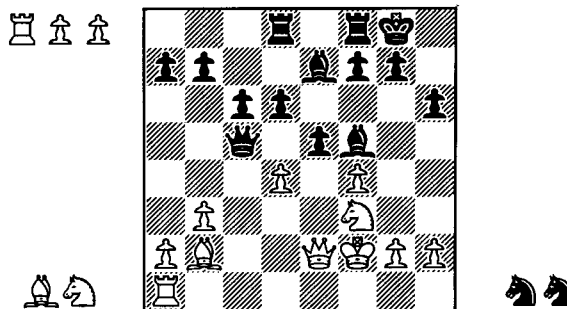
- 20 Kg1xf2

I have serious problems with this move, which exposes the K too much. Mating attacks are easy to whip up in Hostage, so a lot depends on the relative security of the Ks.

- 20 ... (B~N) N@f4
- 21 c4-c5 Qb6xc5

I did not expect c5 and grabbed it! NxR+ is, I think, better.

- 22 Rd3-c3 Qc5xc3
- 23 e3xf4 Qc3-c5+
- 24 P @ d4



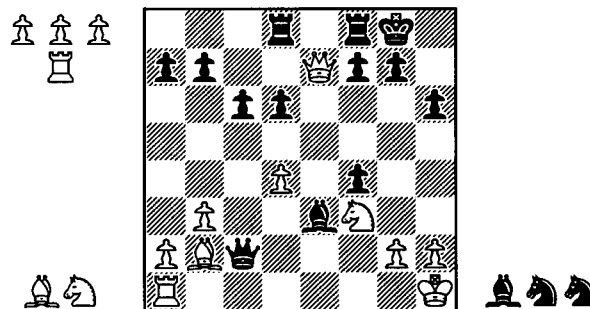
- 24 ... Qc5-a5

I am sure that exd4 would be stronger, as 25 QxB Rde8 is very threatening for the White K.

- 25 N @ g3 e5xf4
- 26 Ng3xf5 Qc5xf5
- 27 Qe2xe7

White cannot afford this, as his K is weakly placed.

- 27 ... Qf5-c2+
- 28 Kf2-g1 (N~B) B@e3+
- 29 Kg1-h1



- 29 ... Qc2xb2

This was the only move that needed serious thought. I have a mating attack if I can redeem both Ns, and to do this need to capture another piece. I had to be sure, meanwhile, that White did not have a mating attack himself, despite the amount of wood he has available to throw into it.

- 30 Ra1-e1 (B~N) N@f2+
- 31 Kh1-g1 Nf2-h3++
- 32 Kg1-f1 Qb2-f2 mate.

If 32 Kh1, then 32...(R~N)N@f2 mate.

Less expert than Peter, I have played the program twice, taking White at leisure while it played at its default rate of ten seconds a move (+1, -1). It is indeed strategically weak, but if you blunder it will pounce. - JDB

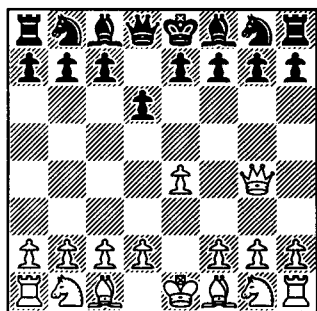
TRANSPORTATION CHESS

Among the more exotic ideas explored by NOST was **Coordinate Chess**, in which like pieces are paired (N+N, B+B, R+R, K+Q), and when a player moves one of a pair to a square not on the same rank or file as the other, thus marking two opposite corners of a rectangle, something happens at the other corners. If White starts 1 Nf3, forming a rectangle b1-f3 with his other knight, something happens at the squares b3 and f1.

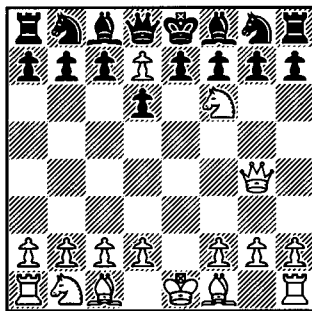
Coordinate Chess was a system rather than a game. One of its versions was **Transportation Chess**, in which the men at the other two corners are transported to vacant squares (pawns not to the eighth rank, and kings not at all). A pawn on the first rank has just its normal one-step move and capture, but on moving to the second rank it regains its two-step option.

Transportation Chess very strongly favours White, and *Nost-algia* 343 (May-June 1994) reported the opinion of Alessandro Castelli, "not yet proven but plausible", that 1 e4 gave a forced win. NOST then adopted a rule that K+Q were no longer a pair for the purposes of defining a transportation rectangle. This rule was adopted too late for inclusion in the original *ECV*, but it would seem that it should have been mentioned in *ECV* 2.

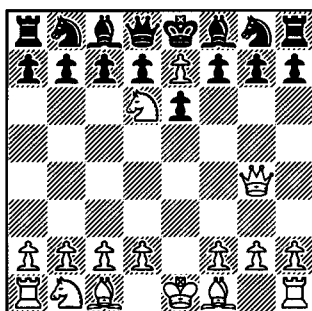
Nost-algia 343 gave several games illustrating the point. 1 e4 d6? 2 Qg4 :



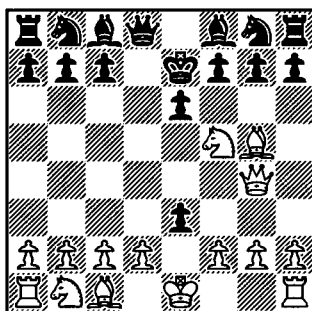
Under the original rule, with K+Q forming a pair on e1/g4, White now had to move his Pe4 and Ng1 to vacant squares, so he played Pe4-d7+ and Ng1-f6+ giving mate :



Again, 1 e4 e6? 2 Qg4 (Pe4-e7, Ng8-d6+) :

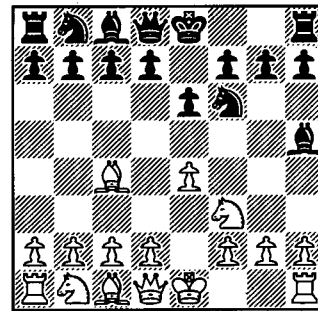


2...Kxe7 (Pd7-e3) 3 Nf5+ (Bf1-g5+) and Black's queen goes :

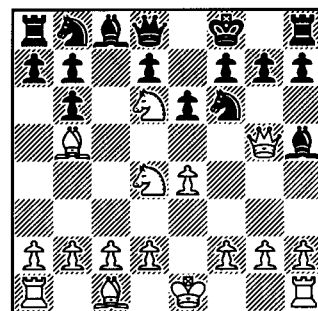


Black could have avoided this by moving his Pd7 to f6 or perhaps g5 instead of e3, but the first certainly doesn't save the game (3 Nxc8+ (Bc1-c5+, Nb8-e8)+ Kd7 4 Qa4+ (Ra1-d6+) 5 Be2 (Pc2-d7+) Kb8 6 dxe8Q and soon mates), nor I think does the second (again 3 Nxc8+ (Bc1-c5+, Nb8-e8)+, and if 3...Kf6 then 4 Bb4 (Nb1-f4+) with 4...Kg6 5 Qh5+ (Rh1-f6+) Kxh5 6 Ng3+ (Ng8-h4) Kg4 7 h3 mate or 4...Ke5 5 Qf4+ (Bf1-d6+, Ne4-c3) mate. There are doubtless simpler ways.

Both these were won by Alessandro Castelli. With Black, he held out a little longer, but not much. Against T. Sala, 1 e4 Nf6 (Bf8-h5) (this at least prevents the horrors starting with 2 Qg4) 2 Nf3 (Bf1-c4) e6 :

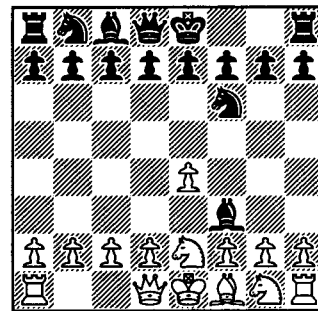


3 Nd4 (Qd1-g5) c5 4 Bb5 (Nb1-d6+, Pc5-b6) Kf8 :

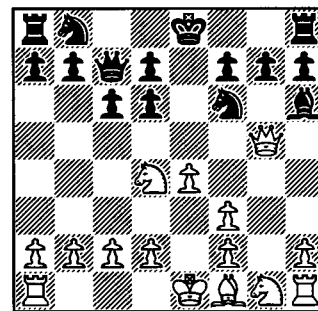


5 Nxc8 (Qd8-g8) and Black resigned (to be a piece down in this game tends to be immediately fatal, because the opponent has one more pair available with which to make transportations).

Against M. Sala, 1 e4 Nf6 (Bf8-h5) 2 Nc3 (Bc1-f3) Bxf3 (Nc3-e2) :

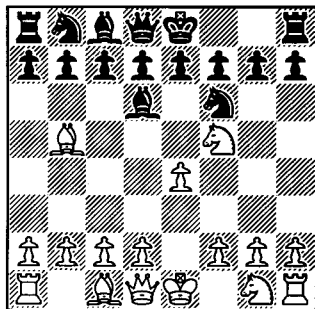


3 gxf3 e6 4 Nd4 (Qd1-g5) Qc7 (Bc8-h6, Pe7-d6) :



5 Nf5 (Qg5-e7, Bf1-h6) mate.

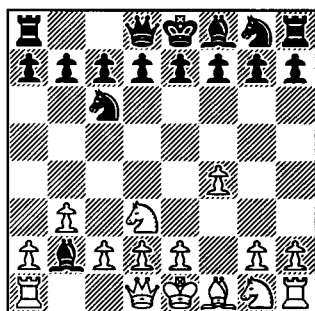
While the adoption of the new rule may have taken away the probability of a provable forced win by 1 e4, the game remains extremely sharp and tactical, and in such games the advantage of first move is always likely to be large. *Nost-algia* 343 carried a single game under the new rule, a win by Philip Cohen, and this too was a quickie won by White. 1 e4 Nf6 (Bf8-d6) 2 Bb5 (Nb1-f5) :



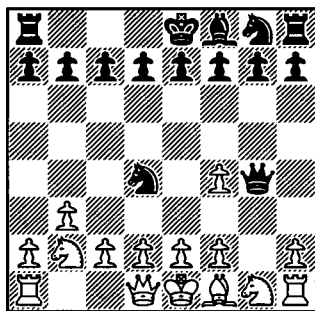
This threatened Nxd6 simultaneously bringing out the queen, and Black could find nothing better than 2...Bb4 (Nb8-f3+). There followed 3 gxf3 0-0 4 Nh6+ (Rh1-e8), and he resigned.

Under the "old" rule, a queen, once developed, could make repeated pairings with its king, developing a new piece each time. *Nost-algia* 344 quoted a remarkable game, won a few years earlier by John McCallion's wife while she was still Robin King, in which she developed each of her seven pieces without moving a single pawn. White was Philip Cohen, who deserves a mention if only for his gentlemanly behaviour at the end.

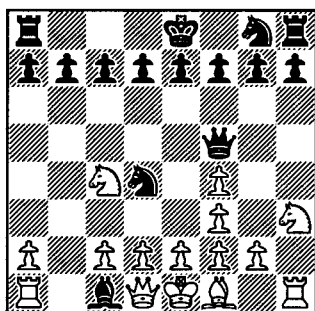
1 b2-b3 (the apparently lethal nature of 1 e4 had not then been realised) Nc6 (Bc8-e5) 2 Bb2 (Nb1-d3, Pf2-f4) Bxb2 :



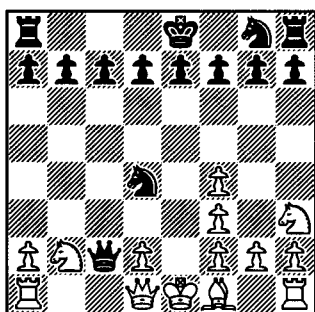
3 Nxb2 (Pg2-f2) and out comes the queen, 3...Nd4 (Qd8-g4) :



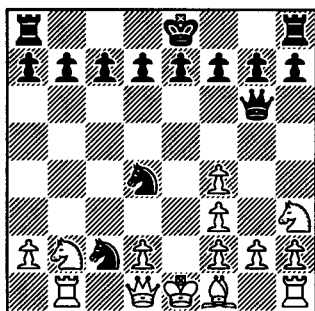
4 Nh3 (Pb3-g2, Ph2-f3) Qf5 (Bf8-h4) 5 Nc4 (Bh4-c1) (trapping and winning the bishop) :



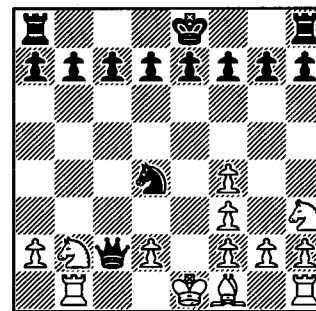
5...Bb2 (if instead 5...Nxc2+, thinking to win the queen by forcing 6 Qxc2, White can accompany his Qxc2 with Pe2-e4, and Black finds that he has lost a knight instead) 6 Nxb2 Qxc2 (Pe2-h2) :



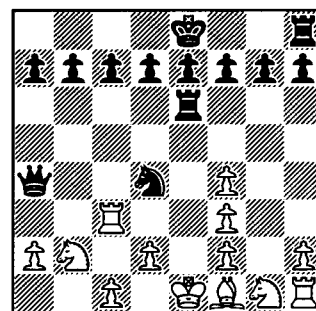
7 Ra1-b1 Qg6 (Ng8-c2+) :



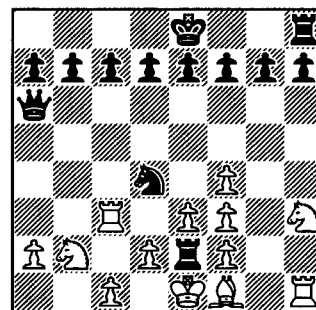
Now Black does win the queen. 8 Qxc2 Qxc2 :



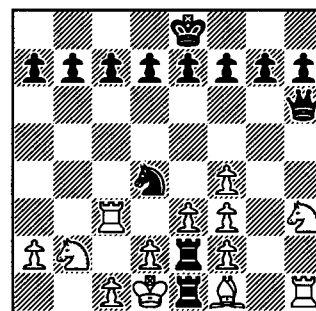
9 Ng1 (Rb1-c3, Pg2-c1) (White at least avoids the immediate loss of further material) Qa4 (Ra8-e6+) :



10 Nh3 (Ph2-e3) Qa6 (Re6-e2+) (10...Qb3 (Pe3~+) would have pushed away the pawn, but this is quicker) :



To capture this rook would allow a mundane mate by recapture. White does the decent thing: 11 Kd1 Qh6 (Rh8-e1) mate.



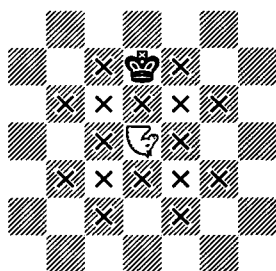
White might have resigned at move 8, but we can all be glad that he didn't.

MATING WITH TRIPLET LEAPERS

material from Marc Bourzutschky, Noam Elkies, and JDB

An x,y leaper is a man which jumps x squares in one direction and y squares in the other, irrespective of whether any intervening squares are occupied. The orthodox knight is a $2,1$ leaper. In VC 47, we looked at “doublet leapers”, which combine the powers of an $x1,y1$ leaper and an $x2,y2$ leaper (the orthodox king being an example, since it moves as a $0,1/1,1$ doublet), and we reported computer work and analysis showing that various doublets, if accompanied by a standard king, could normally force mate against a bare opposing king on boards of up to certain sizes (the word “normally” excluded positions where the lone king could capture the doublet, and also boards so small that the mobility of the doublet was impaired). We also did some work on triplet leapers, but we refrained from reporting it in VC 47 in the hope that we would soon be able to present a complete picture. However, this didn’t happen, we have all moved on to other things, and I have suggested to Marc and Noam that I should report where we have got to. Our present conjectures as to the ultimate behaviour of the triplets still unresolved sometimes differ, but perhaps the presentation of these opposing conjectures will help to stimulate further work.

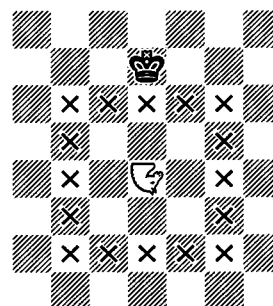
A doublet leaper accompanied by a king can only force mate on a board of up to a certain size (the extreme case being that of the $1,1/1,2$ doublet, which can force mate on square boards up to 16×16). Certain triplets, however, can force mate with the aid of a king however large the board may be. The simplest case is that of the $0,1/1,1/1,2$ triplet :



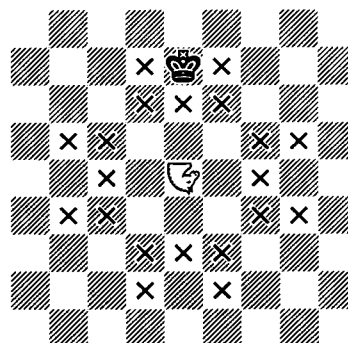
Suppose White has managed to get his triplet to the same file as the Black king (which he can always do, since he can step sideways twice as fast as Black can), and that he has approached to within two squares of it. He can now push Black back to within a square of the far edge, and can then spare a move to bring up his king. Black can use his two moves to run two files to the side, but White promptly steps two files sideways (he may have to retreat one rank to do so, but he can soon advance again), and eventually his king will join his triplet. Together, they can then force Black into a corner, and the rest will be easy.

Almost as easy are the cases of the $0,2/1,2/2,2$ and $0,2/1,2/1,3$ triplets. These cannot force the Black king to the side on their own, but they can keep him penned above a certain rank, and White’s king will have time to advance.

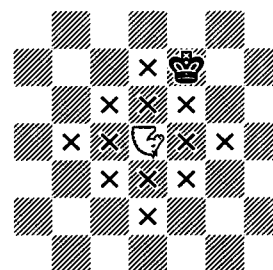
For example, consider the $0,2/1,2/2,2$ triplet:



Black can take two steps to the left, but White can use one move to advance his king and then take a double step left to put his triplet once more facing Black, and again White will be able to bring his men together and force Black back. A similar analysis applies to the $0,2/1,2/1,3$ triplet :

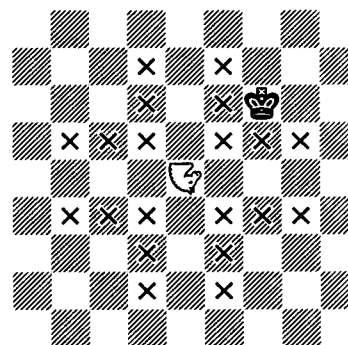


The next observation was made by Noam. He considered the $0,1/0,2/1,1$ triplet



and pointed out that Black can be gradually pushed back to the NE corner (if he moves SE, White has a move to bring up his king, and if he moves NW, the White triplet also moves NW, and eventually Black hits the board edge).

It was now obvious that the king could also be forced back to a corner using a $1,1/1,2/1,3$ triplet :

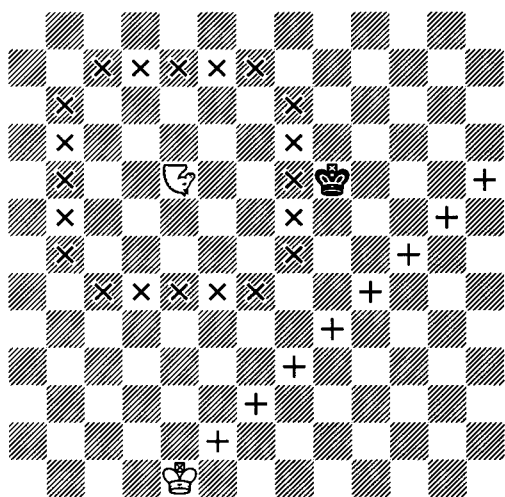


Meanwhile, Marc examined all triplets with co-ordinates not greater than 7 (i.e. up to 6,6/6,7/7,7), and found that only 15 were still winning on a 50x50 board and that one of these ceased to be winning on a 58x58. He subsequently

did further calculations on the leapers not already proved to be wins on a board of any size, and for comparison also on 0,1/0,2/1,1, and found the longest wins on boards up to 100x100, 128x128, and in three cases 150x150 :

	01-02	01-11	02-11	02-12	02-12	03-12	03-13	04-14	11-12	12-13	12-13	13-22	13-23	22-23	23-24
	-11	-12	-12	-13	-22	-13	-23	-24	-13	-14	-22	-23	-33	-24	-25
16x16	40		38			42	41	64		46	49	61	55		56
24x24	72		74			75	72	121		80	91	131	103		108
32x32	111	77	129	107	117	122	106	196	64	119	144	282	162	184	181
40x40	160	99	233	141	156	178	147	282	82	161	215	555	232	290	289
50x50	236	129	453	183	213	260	201	411	104	221	334	1097	334	534	475
54x54	270	141	580	200	237	297	223	474	113	248	397	1377	377	729	575
58x58	307	153	728	218	261	336	245	539	122	275	468	1694	425	draw	685
62x62	346		899			375	269	608		303	551	2048	475		810
66x66	390		1093			418	292	680		330	648	2437	527		943
70x70	435		1312			462	316	750		359	757	2863	582		1096
74x74	482		1555			509	339	821		389	887	3324	640		1262
75x75	494		1620			520	346	838		395	923	3376	651		1295
76x76	507		1685			534	352	857		404	955	3569	670		1350
80x80	558		1963			585	376	934		433	1106	4085	734		1539
85x85	625		2347			650	406	1032		468	1319	4691	810		1776
90x90	698		2765			722	436	1136		507	1561	5531	900		2073
100x100	852		3715			876	497	1341		583	2135	7202	1086		2698
128x128	1369		7179					1949			4358	13077	1702		4987
150x150			10724								6746				7381

While this table was still at the 58x58 stage, I looked at possible systematic winning procedures more complicated than those considered earlier, and in particular at the "one man and his dog" approach. Imagine that the White king is a farmer, the Black king a flock of sheep, and the triplet a sheepdog, which runs out to the flank and helps the farmer drive the sheep in the direction he wants them to go. Specifically, suppose that White wants to drive the Black king to the NE corner, and that he has placed his king to the SW of the Black and within *d* SW-NE diagonals of it. The diagram shows the 0,3/1,3/2,3 triplet :



White wants to keep Black within four diagonals (two light and two dark) of his king, and gradually to advance his own king N/NE/E. Suppose first that Black tries to escape NW. The direct move NW being barred, he can only try a move N; White's king moves NW; Black plays another move N; White's king again moves NW; Black's king can now move NW, but White's triplet moves 3N and 1W, and we are back to the initial configuration (Black king four diagonals above the White, triplet four squares to the left

of the Black king) but three ranks nearer to the top of the board. Alternatively, suppose Black tries to dash across and escape to the SE; the hypothesis is now that the White triplet can run round and head him off, with time in hand for the White king to be able to advance in the meantime.

This procedure appeared to be amenable to examination by computer, and I did so for each of the nine unresolved triplets. For four of them, 0,3/1,2/1,3, 0,3/1,3/2,3, 1,2/1,3/1,4, and 1,3/2,3/3,3, the computer gave me a list of "driveable configurations", each consisting of (a) the number of diagonals by which the Black king was above or below the White, (b) the position of the triplet relative to the Black king, (c) a depth number, and (d) each possible Black move in turn accompanied by a White reply giving another configuration in the list. Where a configuration had depth 1, each White reply was either a king move NW, N, NE, or E to another configuration in the list, or a king move N, NE, or E to the reflection of another configuration in the list (in other words, any Black move could be met by a White king move in a direction that he wanted to go). Where a configuration had depth greater than 1, at least one White reply was a triplet move, but all such replies were to configurations with lesser depth. After a sequence of such moves, therefore, a configuration would be reached in which White had a king move in a desired direction. The number of configurations varied between 185 and 467, and the greatest depth between 4 and 7. I do not claim to have checked every position, but I have done sufficient verification to satisfy myself that the results are correct, and I can make the lists available for inspection by others.

It seems to me that these lists provide the core of a systematic winning process. It is necessary to show that White can always reach one of the configurations in the list, but this is not difficult (White moves his king to the centre of the board and then sends his triplet after the Black king, and when his triplet is sufficiently close to the Black king he starts moving his own king towards the

desired diagonal). We need to adjust the procedure when the Black king is near the board edge (we rely on the top edge to prevent the Black king from continually running away NW, but it may impede the triplet as well, and when it does an alternative move must be specified), and when the kings are close (the White king may occupy a square needed by the triplet, and we don't want to keep advancing the White king towards the Black and walk straight past him) and to show that we can mate him once we have driven him into the corner. However, each of these tasks requires consideration of only a finite number of cases, these being independent of the board size. A complete proof would involve a fair amount of tedious detail, but I am personally confident that the gaps can be filled.

"One man and his dog", at least in this form, failed to work for the other unresolved leapers.

In the meantime, Marc and I both looked at the numerical behaviour of the data. We can expect the maximum length win on a board of side n roughly to be given by some functions $x = f(n)$ for even n and $x = g(n)$ for odd n , these functions f and g not being quite the same, and since we have only two sets of values for odd n the analyses given here consider only the even values.

It should perhaps be stressed that these numerical analyses merely suggest what *might* be true. To find out what actually *is* true in respect of a particular leaper, it is necessary either to find a procedure which will force a win on a board of any size, or to show that there is a board on which it cannot force a win.

Let me take Marc's approach first. He made log-linear and log-log plots of the data, and observed that an apparent cubic power law which seemed initially to describe some of the unresolved leapers was rather an artifact of the small board size, as the slopes eventually all came down. The table "Log-log slope analysis" on the facing page illustrates some of his analyses. Its values show the casual fluctuations to be expected when slopes are calculated from data of this kind, particularly in the region from $n = 50$ to $n = 80$ where the data values are relatively close together, but if these are allowed for the patterns are clear enough. By contrast, the log-log slopes for the drawn cases were increasing even well below the critical size. This is illustrated in the table by the case 2,2/2,3/2,4.

From all this, coupled with the fact that the unresolved cases were still winning at least up to 128x128 if not 150x150 whereas the last not-winning case had failed at 58x58, Marc conjectured they would prove to be winning on all square boards however large.

My own approach was to reflect that if an ending was "generally won", we could expect there to be a systematic winning procedure, and I found it difficult to envisage such a procedure in which the length of the longest win would increase more than quadratically with the length of the board edge. (For example, in Noam's procedure for 0,1/0,2/1,1, we chase him to the top edge, advance our king, chase him back to the right-hand edge, advance our

king again, and so on, and the dependence on the length of the board edge is clearly quadratic.) I therefore fitted a "moving quadratic" to the various data values, putting a quadratic through each successive trio of data values in turn, and looked at how the coefficient of n^2 in this quadratic varied as the board size increased. If the behaviour of the data is genuinely quadratic, these coefficients should be roughly constant down the columns. They are displayed in the table "Local quadratic analysis". The casual fluctuations, particularly in the region from $n = 50$ to $n = 80$, are more marked in this table (essentially because we are now calculating a second derivative rather than a slope), and the last three columns show the effect of changing a single data value by one unit. These columns indicate the level of casual fluctuation likely to be found at any particular depth in the table.

For 0,1/0,2/1,1, which is a proven win on a board of any size, the coefficients do indeed appear to be roughly constant down the column, give or take the casual fluctuations. The same is true of the other triplets which are proven wins on a board of any size, though in these cases the data values are really too few to allow firm conclusions to be drawn and they are not included in the table.

For 0,3/1,2/1,3, 0,3/1,3/2,3, 1,2/1,3/1,4, and 1,3/2,3/3,3, which appear to yield to "one man and his dog", we again have roughly constant coefficients down the columns, and this reinforces my belief that the proofs outlined above can be made rigorous.

The coefficients for 0,4/1,4/2,4 are yet again roughly constant (their jaggiess does not worry me, given the inherent clumsiness of a triplet whose shortest leap is four units long, and there is no evidence of a systematic increase with n), and it is reasonable to conjecture that this triplet also will eventually be found to yield to a systematic winning procedure.

The coefficients for 0,2/1,1/1,2, 1,2/1,3/2,2, and 1,3/2,2/2,3 appear eventually to settle down at around 3/4, 7/12, and 9/8 respectively, but those at the tops of the columns are anomalously low. These anomalies imply that for relatively small boards, the longest wins are appreciably shorter than would be given by the systematic procedures, assuming these to exist. I could not at first imagine how this might be so, but a quadratic coefficient of 7/12 or more implies that a lengthy manoeuvre will be needed to push the Black king even one step in a desired direction, and after reflection and discussions with Noam I find it believable that the full procedure will be needed only when Black is some distance from the nearest edge; on a smaller board, Black may always be so near to an edge that White can take a short cut. I am therefore inclined to conjecture that these triplets also will eventually be found to yield to systematic winning procedures.

Finally, 2,3/2,4/2,5 presents an enigma. Are the anomalously high and apparently increasing final coefficients 0.507 and 0.541 merely casual blips such as occur earlier in the column, or do they imply that if we were to extend the table further, we would see an eventual draw such as occurs with 2,2/2,3/2,4?

This is as far as we have got (and be it noted that Marc and Noam do not accept my premise that any systematic winning procedure will exhibit quadratic behaviour at most). Let me summarize.

1. 0,1/0,2/1,1, 0,1/1,1/1,2, 0,2/1,2/1,3, 0,2/1,2/2,2, and 1,1/1,2/1,3: there are systematic procedures which force a win however large the board may be.
2. 0,3/1,2/1,3, 0,3/1,3/2,3, 1,2/1,3/1,4, and 1,3/2,3/3,3: there are systematic procedures which appear to force a win however large the board may be, but some gaps in the analysis remain to be filled.
3. 0,4/1,4/2,4, 1,3/2,2/2,3, 0,2/1,1/1,2, and 1,2/2,2/1,3: there seem likely to be systematic procedures which will force a win however large the board may be, but in all cases other than 0,4/1,4/2,4 they will be lengthy.

4. 2,3/2,4/2,5: we are not in agreement.

5. The rest: a 2,2/2,3/2,4 triplet cannot force a win on a 58x58 board, and no other triplet with co-ordinates not exceeding 7 can force a win on a 50x50. We believe these to remain not winning as the board size increases, and we believe all triplets with a co-ordinate greater than 7 to be likewise not winning if the board is sufficiently large.

As to where we (or somebody else) should go next, the first step would seem to be to try and find systematic winning procedures for 0,4/1,4/2,4, 1,3/2,2/2,3, 0,2/1,1/1,2, 1,2/2,2/1,3, and 2,3/2,4/2,5. It may be, for example, that 0,4/1,4/2,4 will yield to a version of "one man and his dog" with different lines of constraint. In the meantime, Marc has started a run of 2,3/2,4/2,5 on a 175x175 board, but at press date it is still two months from completion.

Log-log slope analysis of the data on page 211

n1, n2	01-02	02-11	03-12	03-13	04-14	12-13	12-13	13-22	13-23	22-23	23-24
	-11	-12	-13	-23	-24	-14	-22	-23	-33	-24	-25
16, 24	1.450	1.644	1.430	1.389	1.571	1.365	1.527	1.885	1.547		1.620
24, 32	1.505	1.932	1.691	1.344	1.677	1.380	1.595	2.665	1.574		1.795
32, 40	1.639	2.650	1.693	1.465	1.630	1.355	1.796	3.034	1.609	2.039	2.097
40, 50	1.742	2.979	1.698	1.402	1.688	1.420	1.974	3.053	1.633	2.736	2.227
50, 54	1.749	3.211	1.729	1.350	1.853	1.498	2.245	2.954	1.574	4.045	2.482
54, 58	1.797	3.180	1.727	1.317	1.798	1.446	2.302	2.899	1.677		2.450
58, 62	1.793	3.164	1.647	1.401	1.806	1.454	2.448	2.846	1.668		2.513
62, 66	1.915	3.125	1.736	1.312	1.790	1.365	2.594	2.782	1.662		2.432
66, 70	1.856	3.104	1.701	1.342	1.665	1.431	2.642	2.738	1.687		2.555
70, 74	1.846	3.058	1.743	1.264	1.628	1.444	2.852	2.687	1.710		2.538
74, 76	1.896	3.011	1.798	1.411	1.609	1.419	2.770	2.667	1.718		2.528
76, 80	1.869	2.977	1.778	1.286	1.677	1.351	2.862	2.633	1.779		2.554
80, 90	1.901	2.908	1.786	1.257	1.662	1.340	2.926	2.573	1.731		2.529
90, 100	1.892	2.803	1.835	1.243	1.575	1.326	2.972	2.506	1.783		2.501
100, 128	1.921	2.669			1.515		2.890	2.416	1.820		2.489
128, 150		2.530					2.755				2.472

Each value is an approximation to the local slope of the log-log curve. If the data values for boards of side n1, n2 are x1, x2, the value tabulated is { log(x2) - log(x1) } / { log(n2) - log(n1) }.

Local quadratic analysis of the data on page 211

n1, n2, n3	01-02	02-11	03-12	03-13	04-14	12-13	12-13	13-22	13-23	22-23	23-24	Effect of adding 1		
	-11	-12	-13	-23	-24	-14	-22	-23	-33	-24	-25	to x1	to x2	to x3
16, 24, 32	0.055	0.148	0.109	0.023	0.141	0.039	0.086	0.633	0.086		0.164	+0.008	-0.016	+0.008
24, 32, 40	0.078	0.383	0.070	0.055	0.086	0.023	0.141	0.953	0.086		0.273	+0.008	-0.016	+0.008
32, 40, 50	0.082	0.500	0.067	0.015	0.119	0.042	0.168	1.115	0.081	0.619	0.283	+0.007	-0.013	+0.006
40, 50, 54	0.064	0.696	0.075	0.007	0.204	0.054	0.275	1.129	0.039	1.739	0.457	+0.007	-0.025	+0.018
50, 54, 58	0.094	0.656	0.062	0.000	0.062	0.000	0.250	1.156	0.156		0.312	+0.031	-0.062	+0.031
54, 58, 62	0.062	0.719	0.000	0.062	0.125	0.031	0.375	1.156	0.062		0.469	+0.031	-0.062	+0.031
58, 62, 66	0.156	0.719	0.125	-0.031	0.094	-0.031	0.438	1.094	0.062		0.250	+0.031	-0.062	+0.031
62, 66, 70	0.031	0.781	0.031	0.031	-0.062	0.062	0.375	1.156	0.094		0.625	+0.031	-0.062	+0.031
66, 70, 74	0.062	0.750	0.094	-0.031	0.031	0.031	0.656	1.094	0.094		0.406	+0.031	-0.062	+0.031
70, 74, 76	0.125	0.708	0.125	0.125	0.042	0.000	0.250	1.208	0.083		0.417	+0.042	-0.125	+0.083
74, 76, 80	0.042	0.750	0.042	-0.083	0.208	-0.042	0.625	1.083	0.167		0.542	+0.083	-0.125	+0.042
76, 80, 90	0.089	0.764	0.068	0.000	0.068	0.011	0.554	1.114	0.043		0.439	+0.018	-0.025	+0.007
80, 90, 100	0.070	0.740	0.085	0.005	0.015	0.010	0.595	1.125	0.100		0.455	+0.005	-0.010	+0.005
90, 100, 128	0.081	0.756			0.032		0.579	1.124	0.089		0.507	+0.003	-0.004	+0.001
100, 128, 150		0.748					0.583				0.541	+0.001	-0.002	+0.001

Each value is the coefficient of n² in the quadratic through three consecutive data values. If the data values for boards of side n1, n2, n3 are x1, x2, x3, the value tabulated is { x1 · (n3 - n2) - x2 · (n3 - n1) + x3 · (n2 - n1) } / { (n3 - n2) · (n3 - n1) · (n2 - n1) }.

The last three columns show the effect on the quadratic coefficient of a change of +1 in one of the three data values contributing to it, the other two values remaining unchanged.

116 RECIPROCAL ZUGZWANGS

In *VC 60*, at the end of an article on endings with king and two ferses against king with stalemate counting as a win, I remarked that the lowly fers could give rise to positions of remarkable subtlety. But this is not the only ending where the fers can be a thing of unexpected delight. It is just as true of the original shatranj, with its win by "bare king" (a player could win by capturing his opponent's last man, provided that his opponent could not return the compliment next move). With this rule, the ending of K + F against K + F, the ferses running on squares of the same colour, becomes surprisingly subtle. What follows appeared in 1993 in the French composition magazine *diagrammes*, but I don't think there has been an account of it in English.

The story starts one evening in 1990, when David Hooper telephoned me.

"John, do you know the position of as-Suli? It's in the *Companion*." This was the original 1984 edition of David and Ken Whyld's *Oxford Companion to Chess*.

"No, but I can look it up."

"Do so, please. But you will find an error."

"What? An error? In the *Companion*? Never! What a disaster! A catastrophe! Call out the ..."

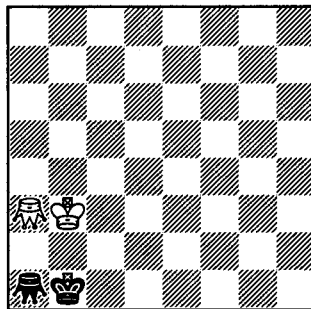
"Shut up, you fool, and listen. In the *Companion*, we follow an analysis by Dawson which appeared in the *British Chess Magazine* in 1920. But Averbakh published a new analysis in 1986, and I have recently been looking at the ending myself and find myself differing from both of them. Could you please have a look at these analyses, and tell me which of them is correct?"

"Yes, certainly, but if neither Dawson nor Averbakh nor Hooper can produce the definitive answer, I don't think you can expect very much from John Beasley. But wait a minute. If there are only four men on the board, I can put the position on the computer."

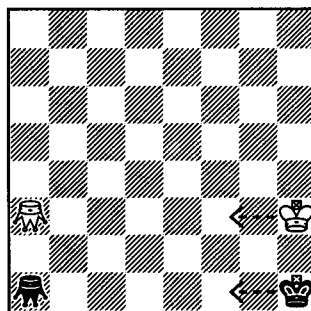
"On the computer? Oh, you *are* clever, you young men." David was 75 at the time, and he used to enjoy teasing those of us who were only fifty. "Do so, please, and I shall look forward to the result. We would like the new edition of the *Companion* to be completely correct."

So I gave the ending to the computer, which confirmed and slightly refined Averbakh's analysis, and it is this analysis which appeared in the second (1992) edition of the *Companion*. It can also be found in the *Classified Encyclopedia*, and in various other sources. Here, however, I shall be looking not at the as-Suli position itself but at some related positions: the positions which are reciprocal zugzwang (Black to move loses, White to move cannot win).

There are 116 of these positions, many of them being grouped in families. Perhaps the simplest is



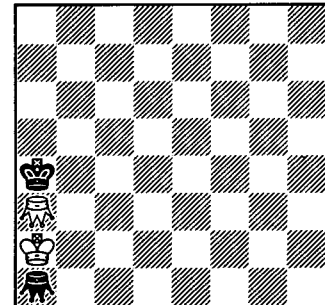
where it is obvious that Black to move must concede his fers within a move or two and that White to move cannot maintain the bind. That this position is one of a family is shown by moving the kings to the far right,



when play will proceed 1 Kg3 Kg1z 2 Kf3 Kf1z etc drawing or 1...Kg1 2 Kg3z Kf1 3 Kf3z winning. There are 28 positions of this kind (Black

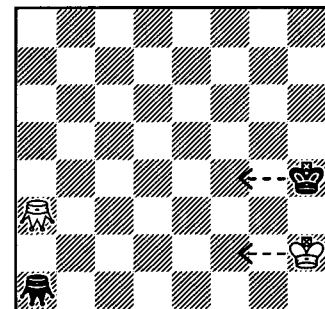
fers and king on the bottom rank, White fers and king facing them on the third rank), and each is reciprocal zugzwang. Let us call them **family 1**.

More subtle is the position



which occurs at the end of as-Suli's improved solution to a problem by al-Adli (see Murray, *A History of Chess*, page 306). This position shows the importance of the qualification "provided that his opponent cannot return the compliment next move". White to move can play KxF, but Black will do the same and this is only a draw. But Black to move must withdraw his king (or play ...Fb1, which is just as bad), and now White's KxF will win.

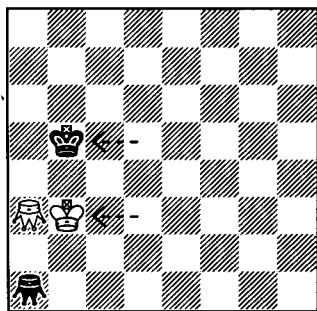
Again, we have a family, as is shown by considering



where play will proceed 1 Kg2 Kg4z with a draw and 1...Kg5 2 Kg1! (we'll look at 2 Kg3 in a moment) Kg4 3 Kg2z with a win. This gives us seven positions with the ferses on a3/a1 (kings on b2/b4 are obviously excluded), and there are six equivalent positions with the ferses on each of b3/b1, c3/c1, and d3/d1. All are reciprocal zugzwang, giving a group of 25 positions. Let us call it **family 2**.

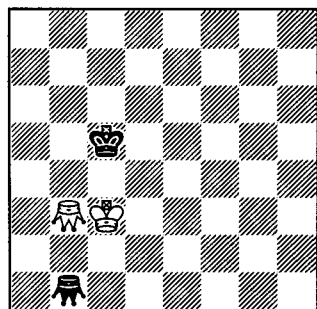
Now what about 1...Kg5 2 Kg3 here? If the ferses are on a3/a1, this gives White an alternative win, but if they are on b3/b1 or further to the

right it leads only to a draw. The key position is



which is reached after 1...Kg5 2 Kg3 Kf5 3 Kf3 etc. White to move here clearly cannot win (1 Ka2 Ka4z, giving the position we saw at the top of the last column). Black to move can try 1...Ka5 hoping for the same again, but White has 2 Fb4+! Kb5 3 Fc3 Kc5 4 Kc2 Kc4 5 Fd2 Kd4 6 Fc1 Ke3 7 Kb1 etc, or 5...Kb4 6 Kb1 winning more quickly.

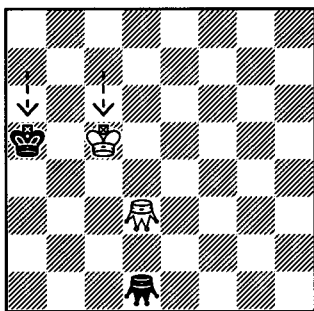
However, if we move everything one square right,



the equivalent line with Black to move becomes 1...Kb5 2 Fc4+ Kc5 3 Fd3 Kd5 4 Kd2 Kd4 5 Fe2, and now 5...Kc4 holds the draw (6 Kc1 Fa2 7 Kb2 Fb3).

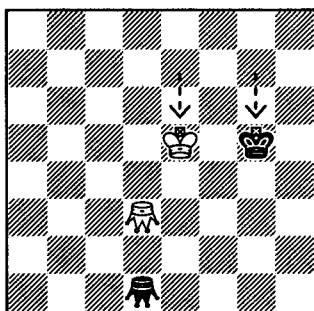
So positions like this are reciprocal zugzwang only if the ferses are on a3/a1. If they are further to the right, Black can draw even if he has the move. There is again a family (if, in the position at the top of the column, we move the kings away to h3/h5, we have 1 Kg3 Kg5z etc and 1...Kg5 2 Kg3z etc), but it comprises seven positions only. Let us call it **family 3**.

There is one further family of reciprocal zugzwangs in which the ferses face each other at the bottom of the board. It depends on the position which is shown at the top of the next column :

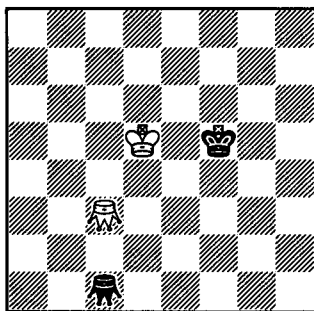


White to move here clearly cannot win (1 Kc4 Kb6! and Black will draw by attacking White's fers from above). Black to move will lose after 1...Ka4 2 Kc4, but can he not play 1...Ka6 hoping for 2 Kc4 Kb6 and as before? No, 2 Fe4! Kb7 3 Ff3 Kc7 4 Fg2 Kd7 5 Kd4 etc, or 2...Ka5 3 Kc4 etc.

This gives us another family, since the positions with the kings opposing each other on a6/c6 up to a8/c8 are also reciprocal zugzwang, and so are the four positions typified by



with the kings on the other side. There are one or two additional points in the analysis, but the interested reader will be able to work these out for himself. But why can we not shift this last position to the left? Because if we do so, giving

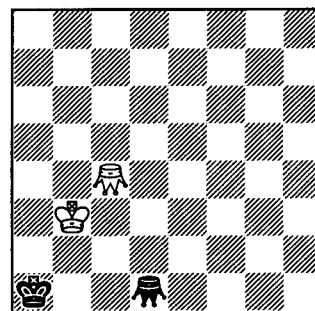


we find that Black to play can draw by 1...Kf6, since after 2 Fb4 Ke7 3 Fa3 Kd7 the move equivalent to 4 Fg2 at the top of the column does not exist.

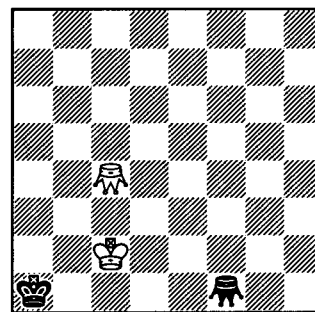
So this family, with the ferses facing each other on d3/d1 and the kings facing each other on the fifth rank or above, has eight members. Let us call it **family 4**.

This completes the positions with the ferses facing each other on the third and first ranks. The total so far is 28 + 25 + 7 + 8 = 68.

Family 5 consists of the five positions typified by

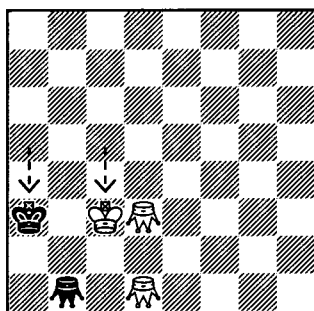
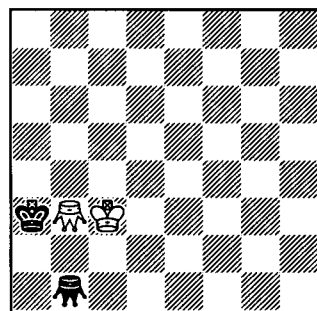
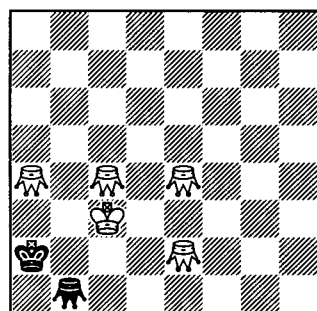
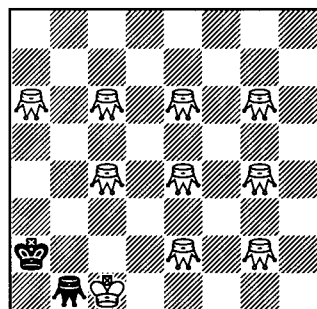
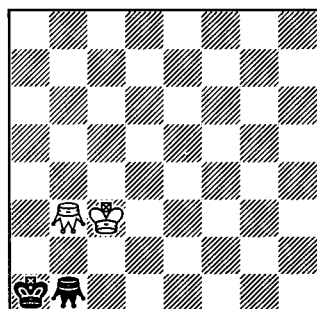
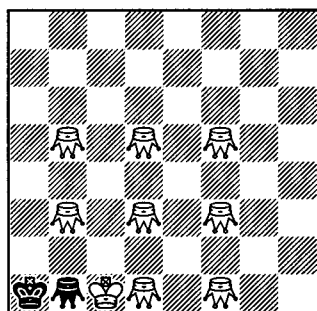


(which can be shifted anywhere along the bottom rank) and the four similar positions with the White fers two squares further right. The lines 1 Fd3 Kb1z and 1...Kb1 2 Fd3z are obvious, but what if Black to move chooses 1...Fe2? 2 Kc2 clearly (though 2 Kc3 also wins), but after 2...Ff1 we have



and White must be careful. Simplest is to play 3 Fd5 and 4 Fe6 while the White king is blocking the Black, and only then to resume the pursuit of the Black fers (3 Fd5 Ka2 4 Fe6 Ka3 5 Kd2 etc). An immediate 3 Kd2 also wins (3...Kb2 4 Fd5 etc) and so do various other moves, but 3 Kd1 fails (3...Kb2 4 Ke1 Kc3 with a draw). We saw this idea at the top of the previous column, and we shall see it again: Black cannot save his own fers, but he may be able to chase White's, and White must move his own fers to safety before going after Black's.

Family 6 consists of a group of 35 positions featuring a Black fers on b1:



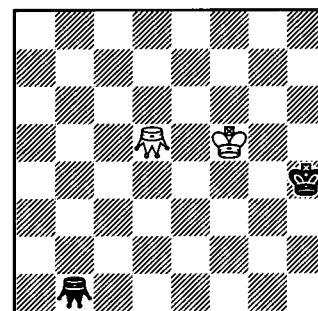
The last diagram (immediately above) shows twelve positions, since the White fers can be on either d3 or d1 and the kings can face each other on any rank from the third upwards.

The unifying properties of this group are that (a) the Black fers cannot escape from the corner, and (b) when the White fers and king have closed in on it we shall have one of the reciprocal zugzwangs of family 1. The most interesting position is perhaps that in the second diagram (White Kc3, Black Ka1), when the play with Black to move goes 1...Fa2 2 Fc4 Kb1 (2...Fb1 3 Kb3 Fa2+ 4 Ka3z Kb1 5 Fd3z Ka1 6 Fc2z Fb1 7 Fb3z) 3 Fd3z Ka1 (3...Kc1 4 Fc2 Fb1z Fb3z) 4 Kc2 Fb1+ 5 Kc1z Ka2 (5...Fa2 6 Fc2z) 6 Fc4z Ka1 7 Fb3z Fa2 8 Fc2z.

We may also note the first position in the third diagram (kings on c1/a2, White fers on a6). Why cannot Black to move draw by playing 1...Ka3 and hunting the White fers down? Because Black can avoid the loss by "bare king" only by taking White's fers on the next move after the capture of his own; hunting it down at some later time is not good enough. But in that case, why cannot the White fers stand also on say a8? Because it must be close enough to prevent the Black fers from escaping from the corner. With the White fers on g6 (the most distant point in this diagram), the win with Black to move unfolds 1...Ka1 2 Ff5z Fa2 3 Kc2 Fb1+ 4 Kc3 Ka2 5 Fe4z Ka3 6 Fd3z etc. On a8, 1...Ka1 2 Fb7 Fa2 3 Kc2 Fb1+ 4 Kc3 Ka2 5 Fc6 Ka3 6 Fb5 Fa2 7 Fc4 Ka4 8 Kb2 Kb4 9 Fd3 Fb3 gives Black a draw.

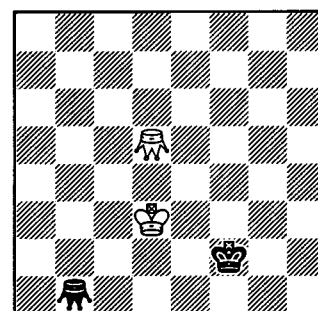
We have now seen 68 + 9 + 35 = 112 reciprocal zugzwangs. The remaining four comprise two isolated positions and one pair.

The first isolated position

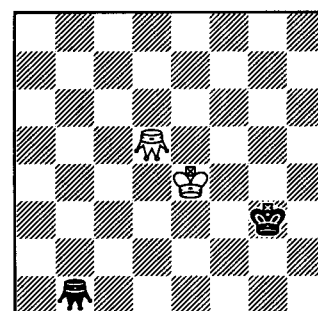


is at first sight very simple: 1...Kg3 2 Ke4 Kf2 3 Kd3 Ke1 4 Fc4 with a position in family 3. But after 1...Kg3 2 Ke4 Black's best move is 2...Fc2. Now White must play 3 Ke3, and after 3...Fb3 his fers must flee sooner or later; simplest is 4 Fc6 Fa2 5 Fb7 etc.

So, the position

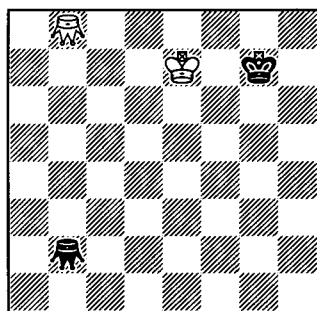


is not reciprocal zugzwang (White to move wins by Kc3 or Kd2), and



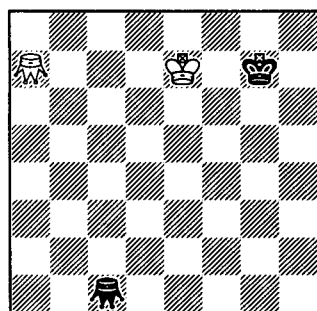
is not reciprocal zugzwang either (White to move wins by Kd4); why is the position at the top of the column different? Because now Black can attack the White fers from above: 1 Ke4 Kg5! drawing (for example, 2 Kd4 Kf5 3 Fc4 Ke6 4 Kc3 Kd6 etc). We also have 1 Ke5 Kg4 drawing, and 1 Fc4 Kg3. But if Black is to move, we have 1...Kg3 2 Ke4 as above, or 1...Kh5 2 Fc4.

The first position of the pair is

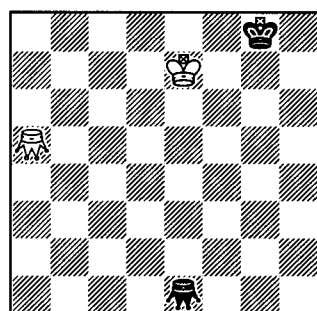


and is the only position of reciprocal zugzwang where the Black fers is away from the edge.

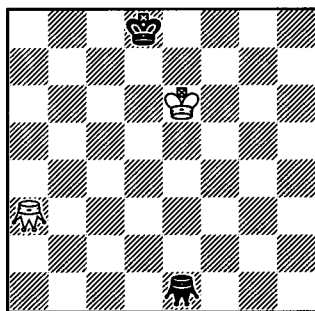
Play with Black to move starts 1...Fc1 2 Fa7, and we have the second position of the pair :



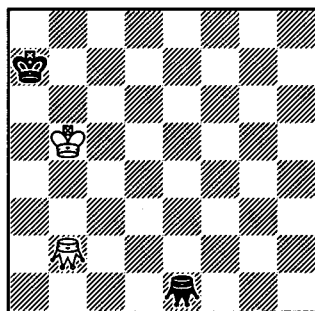
Black's most testing defence is now 2...Kg8, to meet 3 K~6 by 3...Kf8 etc. So the White fers runs to a less exposed position while Black's king is still blocked, 3 Fb6 Fd2 4 Fa5 Fe1 :



Black now threatens to play 5...Kg7 bringing his king down to protect his fers (6-9 Ke3 Kg3 10 Ke2 Ff2), so White's king must start moving: 5 Ke6. But this opens the way for the Black king to start chasing the White fers, 5...Kf8. This forces White's fers to retreat again, 6 Fb4 Ke8 7 Fa3 (this is the first point at which White has had a choice, 7 Fc3 also being good enough to win) Kd8 :



Another fers move will allow 8...Kc7 drawing. White must play 8 Kd6, and after 8...Kc8 he must play 9 Kc6. Now, after 9...Kb8, White can play, 10 Fb2 (the second point at which he has had a choice, since 10 Kb6 also wins though it takes a move longer), and after 10...Ka7 11 Kb5 things are at last straightforward :

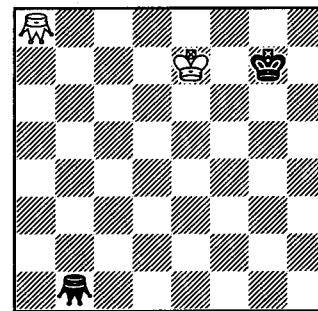


White is now four moves from the Black fers, Black, even after his next move, will be five moves from the White fers, so White can finally stop manoeuvring and hunt Black down.

All right, so why doesn't 1 Fa7 win for White in the original position? Doesn't it gain a tempo on the above?

No, because Black no longer needs to play ...Kg8 to keep open the option of going after the White fers. An optimal line starts 1...Fc1 2 Fb6 Fd2, and with Black's king still on g7 White must play 3 Ke6 to prevent it from linking up with its fers. The sequel 3...Kf8 4 Fa5 Ke8 5 Fb4 Kd8 6 Kd6 Kc8 7 Kc6 Kb8 8 Fa3 Ka7 9 Kb5 gives the diagram above with the ferses on a3/d2 instead of b2/e1, and 9...Fc1 saves the day for Black.

The final position shows the longest winning line of all, but the play is rather like that which we have just seen even though the ferses are on light rather than dark squares. We will therefore pass over it fairly briefly.

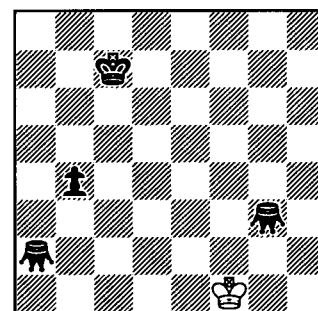


1...Kg8 2 Fb7 Fc2 3 Fa6 (3 Fc6 also wins) Fd1 4 Fb5 Kg7 (once again Black threatens to link up his king and fers) 5 Ke6 Kg6 6 Ke5 Kf7 7 Fa4 (or Fc4) Ke7 8 Fb3 (or Kd5) Kd7 9 Kd5 Kc7 10 Kc5 Kb7 11 Fa2 (11 Kb5 takes a move longer) Ka6 12 Kb4 Fe2 13 Kc3 Kb5 14 Kd2 Ff3 15 Ke3 Fg4 16 Kf4 Fh5 17 Kg5 and 18 KxF.

I doubt if many of us would want to go back to playing chess with ferses instead of queens, but something was definitely lost by the change.

A MAKRUK ENDING

Paul Byway has been playing and enjoying Makruk, and has produced an attractive variation on one of the endgame studies we saw in VC 58. There, we saw a draw with K on a1/b2 against Fa2 + Fb1 + F~; here, the draw is against Fa2 + Fb3 + F~.



Promotion is on ranks 3/6 but only to fers, and K + 3F normally win against a bare king unless all the ferses run on squares of the same colour.

1 Ke2 Ff4 (1...Fh4 2 Kd3 Fb3 3 Ke4) 2 Kd3 Kd6 (2...Fe5 3 Kc2 Fd4 4 Kb2 b3F 5 Ka1) 3 Kc2 Kd5 4 Kb2 b3F 5 Ka1 and draws, but not 3 Kc4? b3F+, when 4 Kc3 can be met by 4...Fa4 and 4 Kb4 by 4...Fc2.