CHINOOK IS WORLD CHECKERS CHAMPION!

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The computer program CHINOOK is now the World Checkers (8 × 8 draughts) Champion. The defending champion, Dr. Marion Tinsley, resigned his World Championship match against CHINOOK after 6 games due to illness. CHINOOK then played a match against Don Lafferty and retained its title.

Although this is the first time a computer program has been declared a World Champion against human opponents, the CHINOOK team feels little satisfaction in achieving the goal. It is hoped that Dr. Tinsley makes a full recovery, and that a match with CHINOOK can be arranged in 1995.

DEREK OLDBURY (1924-1994): AN OBITUARY

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Derek Oldbury, a World Champion at checkers (8 × 8 draughts), died July 9, 1994. A keen games and computer games enthusiast, Derek was an avid reader of the *ICCA Journal*, and contributed several letters which appeared in these pages. In his sixties, Derek taught himself computer programming, and wrote a checkers program. His interest in computing led to the creation of his electronic games magazine *Alpha-Beta*, a quarterly publication containing articles, source code and binaries for a variety of games, including chess. His parting is greatly regretted by all who knew him.

DEREK OLDBURY: A EULOGY

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I first met Derek Oldbury at the 1989 Computer Olympiad, where each of us had entered our computer draughts programs. I already knew him by reputation through his famous MOVE-OVER book, and I had tried to use some of the ideas he had put forward in the early SAGE program I was entering in that tournament. What was striking about Derek's work was his attempt at a scientific analysis of the game, into parameters that could be used in a computer program — virtually the only attempt at this in the pre-computer age. Anyway, on meeting him, I found the intelligent and likable man lived up to the legend, and I struck up a friendship that we continued in subsequent years through correspondence and many telephone calls. The 1989 Olympiad saw most of the people who are active to this day in computer draughts — Gil Dodgen with his first program on the Apple Mac, Jonathan Schaeffer with his first version of CHINOOK, Derek Oldbury with his HUSTLER program just ported from the Apple-II to a 386 SX-16 PC, and myself with my early

Sage program, running on a very humble Commodore-64 (I think the computer Chinook used was several hundred times faster!). Martin Bryant came on the scene later. Derek enthusiastically played all our programs many games, and, being a real sportsman, often played weaker moves just to see if our programs were able to pick up the advantage. There are not many world champions around who would do that, believe me! We called these games 'friendlies', although Derek wryly pointed out that computers do not understand the meaning of that word when it comes to playing! He beat my early Sage program most of the time, with an occasional exception (of which I am still proud) in which a draw was agreed.

Derek noted at the time that many of the draughts programmers came from the chess world, bringing along some inappropriate luggage. In one game between Derek Oldbury and Chinook, Chinook was aggressively occupying the centre of the board and floating its back men. Derek pointed this out and Jonathan Schaeffer said: "Well, that's good in chess" to which Derek retorted: "Ah, but this isn't chess!".

After that tournament, Derek and I corresponded about the pitfalls in our respective programs, and tried to help each other learn. As many of you will know, Derek was a great correspondent, always willing to take the time to answer your letter in detail. As I developed the first PC version of Sage, he helped and encouraged me with analysis and test-play.

Derek always understood how to use computers for analysis — sometimes a game a computer loses is of greater value than one it wins, because it highlights a new idea. Here is an extract of a letter from him: "I had this game with Sage v70 and it is a much improved performer. The presentation is cleaner and better all round. The Replay function is good, step by step. In this game I had the Black pieces and Sage v70 the White: 11-15, 23-18, 8-11, 27-23, 4-8, 23-19, 9-14, 18-9, 5-14, 22-17, 15-18, 24-20 (new to me) 18-23, 28-24, 11-15, 25-22, 7-11, 31-27, 15-18, 22-15, 11-18 17-13, 6-9, 13-6, 2-9, 20-16, 3-7, 29-25, 8-11, 21-17, 14-21, 26-22 11-20, 22-15-6, 1-10, 27-18, 20-27, 32-23, 7-11, 25-22, 9-13, 30-26, 11-16 18-15, 10-14, 22-18, 14-17, 15-11, 21-25, 18-14, 25-30, 14-9, 30-25 and the piece on 26 is lost. It is not easy to see where White went wrong, no obvious error. At the new move (24-20), Chinook went 32-27 against me, to a draw, but I missed a win later. 32-27 *does* draw."

In 1991, there was another Olympiad, and this time Derek and I collaborated to produce a program, called Checker-Mate, to compete. We knew that we would have to play Chinook, running on formidable hardware, so it was decided to try and combine Derek's draughts knowledge with my programming experience. As things turned out, it was a bit of a rush job, and there was a problem with the time-control mechanism (my fault), so our program lost its games by time forfeit. However, this is not the whole story. Derek had prepared a lot of material in the 9-14 opening, with many traps for White, so when we had Black against Chinook, play progressed thus: 9-14, 22-18, 5-9, 24-19, 11-16, 25-22, 8-11, 28-24, 16-20, 30-25? Chinook had taken the bait! Without a book, a computer can often walk into trouble like this, because the moves preceding it look natural... 4-8? But our program blows it! Derek had neglected to supply this particular line, assuming the computer could figure it out. However at this time, the program was not good enough. (Out of interest, I checked it on the latest Sage, which now *does* find the correct move...) Checker-Mate went on to blow it from here — however, watching this game was Martin Bryant, who was competing with Colossus. He spotted the win, put the correct 11-15 winning move into its book, and used it to beat Chinook in the next round of the competition. You could understand me and Derek feeling a little annoyed!

In more recent times, I knew that Derek had a difficult time. His failing health interfered with his plans for match-play, and this was compounded by a lack of support from some sections of the draughts world. While making it as World Champion was in some ways the fulfilment of a lifetime ambition, he was disappointed for sporting reasons that the title match was not against Marion Tinsley. Right up to the end, Derek was always keen to explore new territory — he started writing programs for other games such as Othello, Go and even Chess! He edited a disk-based magazine called *Alpha-Beta*, which contained articles and programs aimed at people interested in learning how computers play games. In the end, his passing was quite sudden. Many of those who knew him therefore failed to bid him a proper goodbye. As for myself, I shall try and compensate my great loss by honouring him in a special edition of *Alpha-Beta*, collecting texts (including the complete Move-over), opening books and programs written by Derek, as well as a number of interesting programs and articles from other sources. In honour of his memory this compilation will be released as freely-copyable public-domain software discs for PCs and I shall arrange to make it available to all those interested.