

# Review of *One Jump Ahead: Challenging Human Supremacy in Checkers*

Peter F. Patel-Schneider

In 1989, Jonathan Schaeffer of the University of Alberta set out to build a world checkers champion. He succeeded. In 1994, CHINOOK, the program written by Schaeffer and his group, won the Man versus Machine World Checkers Championship. (Although CHINOOK has now mostly retired from championship checkers, it is still possible to play CHINOOK. To play CHINOOK or just see information about CHINOOK and checkers in general, go to [www.cs.ualberta.ca/~chinook](http://www.cs.ualberta.ca/~chinook).)

Schaeffer then went on to write a book about his quest. The result, *One Jump Ahead: Challenging Human Supremacy in Checkers*, is an extraordinary book. *One Jump Ahead* provides a history of CHINOOK, from its initial success in winning the United States Checkers Championship in 1990 through its losses to the world human checkers champion to its eventual success. By the way, Schaeffer gives an excellent talk about his experiences with CHINOOK that I also highly recommend.

If *One Jump Ahead* had merely been a chronicle of the technical achievements in the development of CHINOOK, it would have been a good book. However, the book is instead more about the human aspects of Schaeffer's journey from checkers neophyte to friend of many of the world's best human checkers players.

The last book that I read that was anything like *One Jump Ahead* was Tracy Kidder's book, *The Soul of a New Machine* (Little, Brown, and Company, 1981). However, *One Jump Ahead* is quite different and, in my opinion, much better. *The Soul of a New Machine* was written by an outsider—one who was not really part of the activities involved in the building of a new microprocessor. Nevertheless, it pro-

vided more than a glimpse of the intense process it described.

*One Jump Ahead* was written by the person most involved in the process. Thus, it provides us with a direct view of Schaeffer's maturation—a maturation that we should all hope to have. Schaeffer does not pull any punches in his book; we see many of his elations, his disappointments, and his flaws. In this way, *One Jump Ahead* provides us with a series of valuable insights into human nature.

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**One Jump Ahead:  
Challenging Human  
Supremacy in Checkers,  
Jonathan Schaeffer,  
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However, there is even more to *One Jump Ahead*. The world checkers community is much less well known than the world chess community, which is unfortunate because the world checkers community contains a number of people whom the world should know. *One Jump Ahead* provides us with an enlightening view of this community. We get to know Marion Tinsley, the nearly unbeatable world champion of checkers for more than three decades. We also get to know many of his friends and rivals, including Asa Long, Don Lafferty, and Derek Oldbury. We see these checkers players not just as checkers players but as human beings—much more decent human beings than the comparable chess

players. We see how CHINOOK breathes new life into the stagnant state of world checkers, making Tinsley say that playing CHINOOK made him feel young again. We see some of the politics of checkers and see how this decent group of players and administrators can end up obstructing the world championship match between Tinsley and CHINOOK, a match that Tinsley himself wants. We see how Tinsley admirably overcomes this obstruction, how Tinsley's sacrifice enables his ultimate defeat, and how Tinsley deals with the end of his domination of checkers.

On a sad note, the community described in *One Jump Ahead* is largely gone. Most of the best players that played CHINOOK are now dead, and the checkers community is poorer by their absence. *One Jump Ahead* thus serves yet another purpose—keeping the memory of these decent and interesting players alive.

Even though *One Jump Ahead* is mostly about nontechnical issues, Schaeffer has successfully incorporated considerable information on computer game playing in the book. These insights into building champion computer game programs are quite valuable in themselves. They add yet another facet to the book as a whole.

Of course, *One Jump Ahead* would not have been so interesting if the events that it recounts were not so interesting. CHINOOK's path from birth to ultimate success had many challenges. Schaeffer had to first combat the misconception that checkers was a "solved" game, which meant he had to fight for recognition and funding, often unsuccessfully. Schaeffer had to get the checkers federations to recognize CHINOOK as a potential competitor and then had to get them to live up to the consequences when CHINOOK won the right to challenge for the World Checkers Championship. Finally, Schaeffer had to deal with CHINOOK's success and how this success came about and what the consequences of this success were. Each of these twists and turns has lessons to be learned about human nature.

In *One Jump Ahead*, we see how Schaeffer deals with these challenges; how he grows; and how he handles

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the final, unnerving success of CHINOOK. We see how CHINOOK could have dramatically improved the state of championship checkers but didn't. We see how Schaeffer's dreams have been achieved in a way he could not have foreseen and how he deals with the fact that his final victory wasn't immediately satisfying.

If you read *One Jump Ahead*, you will probably learn something about checkers, and you will probably learn something about computer game playing. However, you will definitely see something important about humankind. I was deeply moved when I read *One Jump Ahead*, and I still get emotional when I think about it. I don't think that I can give any higher praise to a book than that.

**Peter F. Patel-Schneider** is a member of the technical staff at Bell Labs Research. He received his Ph.D. from the University of Toronto in 1987. His research interests center on the properties of description logics and related areas, particularly provers for description logics and propositional modal logics. His e-mail address is [pfps@research.bell-labs.com](mailto:pfps@research.bell-labs.com).

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*Edited by Paul J. Feltovich, Kenneth M. Ford, and Robert R. Hoffman*

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