

CS/ENGRI 172, Fall 2003: Computation, Information, and Intelligence
9/17/03: Final Thoughts on Chess

Some opinions on computer chess-playing

- “Chess is the *Drosophila* [fruit fly] of artificial intelligence.”
 - Alexander Kronrod, 1965
- “The Brain’s Last Stand.”
 - *Newsweek* May 5, 1997 cover on the Kasparov/Deep Blue rematch
- “Deep Blue [had] ingenious counterattacks ... I.B.M.’s master plotter played the strongest purely positional game ever produced by computer ... Deep Blue’s defensive power was once more extraordinary: with great virtuosity, it fought through ... Deep Blue [engaged in] original play in the opening ... Deep Blue played as though virtuosity in difficult endgames was second nature. No one had foreseen its scintillating method of certifying the draw.”
 - Robert Byrne (Grandmaster and NYT chess columnist), *New York Times*, May 13, 1977.
- “The truth of the matter is that Deep Blue isn’t so smart. It does not for a moment function in the manner of a human brain. It is just a brute-force computational device. Deep Blue is unaware that it is playing the game of chess. It is unconscious, unaware, literally thoughtless. It is not even stupid ...”²
 - “Machines aren’t nearly as flexible and crafty as humans.”
 - “[Computers] never learn ...”
 - “Deep Blue plays chess better ... but only because human beings have carefully programmed Deep Blue to play chess. Left on its own, Deep Blue wouldn’t even know to come in out of the rain.”
 - Joel Achenback, *Washington Post*, May 10, 1997.
- “The “skin-of-an-onion” analogy is also helpful. In considering the functions of the mind or the brain we find certain operations which we can explain in purely mechanical terms. This we say does not correspond to the real mind: it is a sort of skin which we must strip off if we are to find the real mind. But then in what remains we find a further skin to be stripped off, and so on. Proceeding in this way do we ever come to the “real” mind, or do we eventually come to the skin which has nothing in it?”
 - Alan M. Turing, Computing machinery and intelligence. *Mind* (59), pp. 433-460, 1950.

²Colby Cosh remarked that “the media exuded a hysterical self-reassurance” (“Computer Bytes Man”, *Alberta Report*, 1996).