

## TWENTY-TWENTY TOURNAMENT VISIONS : AEGON 1991

*Dap Hartmann*

Leiden, The Netherlands

"We are not interested in the possibilities of defeat; they do not exist"  
-- Queen Victoria to A.J. Balfour, in 'Black Week', Dec. 1899.

Almost a century ago, Queen Victoria wrote these words. Only a handful of years ago, it was the average opinion of grandmasters with respect to computers. But computers got stronger, and grandmasters were occasionally being beaten by them. The annual AEGON tournament provides a true arena to investigate the latest progress in artificial chess-playing. Will computers prove to be tougher competition than last year? In the 1989 edition of this event, there was only one grandmaster (Hans Ree), and the humans took 71% of the points. Last year, when two grandmasters participated, the computers had clearly gained strength. This time the living participants gathered 'only' 56% of the points. This year, no less than 6 grandmasters played in the world's largest annual man-computer event, the AEGON tournament.

### **Under the spheres**

The venue was different this year. With so many players (20 humans, 20 computers), the old site had been outgrown, and the battlefield was moved to AEGON's Mariahoeve headquarters. The hall of this building made a lovely arena for this exiting event. 5000 multi-colored spheres hung down from the glass ceiling, creating a mysterious and restful atmosphere. The six grandmasters (John van der Wiel, Jeroen Piket, Larry Christiansen, Genna Sosonko, David Bronstein, and last-minute addition Roberto Cifuentes) were to assist the established computer defeaters (Lex Jongasma, Ad van den Berg, Bert Kieboom, Fred van der Vliet, Edgar Blokhuis, Michiel Wind and Tim Krabbé) and seven other chess-players in saving the human honour yet again. The computer camp's aces were Hitech, Chess Machine Schröder, M\_Chess, a 60 MHz Mephisto, and the Fidelity machine Karpov used as one of his seconds in the last world championship match. Unfortunately, Deep Thought was not present. A busy working schedule, and other commitments prevented the world's number one artificial chess-player from participating in The Hague.

### **Human meets human**

It was an exciting tournament, and not just for the games. For the first time in the history of this event, a transatlantic computer was operated on site by its creator. Hans Berliner had come to taste the friendly atmosphere the AEGON tournament breezes. It certainly added tremendously to the status of the event to have him present. I strongly hope that AEGON will extend more such invitations and will provide the necessary financial support for future editions of the tournament. Finally, Hitech was no longer a mysterious machine situated in Pittsburgh, made in USA, but operated by a Dutchman. After playing Hitech, opponents now had the opportunity to discuss the ins and outs of the game, as well as the concept of the machine, with Hans Berliner. It was delightful to see Bronstein and Berliner in conversation. As if computers never existed, they discussed old times and mutual friends. Another historical meeting was between Hans Berliner and Piet Bakker. One has only to read through old issues of this Journal to refresh the memory of their paper battle. Unfortunately, Bakker did not meet Hitech in the tournament.

### **Results**

The humans were more serious than ever before. Especially John van der Wiel, who won all his six games. Although he was realistic enough to state that "you have to allow losing the occasional half or even full point", he had purposefully tuned his style to deal with computers. He won the tournament a full point ahead of Piket, Cifuentes, Wind and Tadjman. Surprisingly enough, the highest finishing computer (M\_Chess) occupied only a (shared) 9<sup>th</sup> place. No more than 3 computers finished within the first nineteen. In his opening speech, Jaap van den Herik had predicted that two computers would be amongst the top-5. He could hardly have been more wrong. After the tournament, the opinion prevailed that computers still had a long way to go, and that it seemed like people were learning to exploit their weaknesses. It was as if it had been easier this time than last year.

However, a careful inspection of the final results shows otherwise. This year, the human field, led by six grandmasters, claimed 61% of the points. Discounting all grandmaster vs. computer games, the figure drops to 53%. Adding to this the results of the same two grandmasters that played last year (Bronstein and Piket) the human score rises to 'only' 56%, or equal to last year. Considering that Hitech was showing clear signs of illness (some weeks later, Hans Berliner reported that a faulty chip was probably the culprit. I know, it is the same old excuse: when a computer plays badly, there is 'something wrong with the machine'. But it happens to be true, in this case at least). Also, Deep Thought was not playing. The same held true for last year, of course. There is no need for cheap excuses. The human chess-players showed convincingly that they were stronger this year. I would not bet my life on next year, provided that all efforts are undertaken to get the strongest computers in the arena. Maybe six grandmasters will not be enough to attain a human victory then. We will see.

[The final standings and a small selection of the games have been published in Vol. 14, No. 2, pp. 99-100 of this Journal. More selected games can be found in Vol. 14, No. 3, pp. 168-169. – Eds.]

#### A weird game

**Hitech - V. Tadjman**, AEGON 1991 round 6, PU 11.

1. e4 d6 2. d4 c5?! This move was suggested by Van den Berg, and takes Hitech out of its book. I have found no other instance of a game where this move was played. A new anti-computer weapon? 3. dxc5 Qa5+ 4. Nc3 Qxc5 5. Be3 Qa5 6. Qd5 Qxd5 7. Nxd5 Kd8 8. Bc4 e6 9. Nc3 Bd7 10. f4 Bc6 11. Nf3 Nf6 12. Ng5 Ke8 13. f5 Here Tadjman heavily regretted having followed Van den Berg's advice. "I should have played my own game", he complained at this stage. Afterwards, he admitted he had been ready to resign. "But it would be such a disgrace, losing in a bare 13 moves, that I decided to play on for a little while". That turned out to be not such a bad idea. Hitech had already shown signs of being 'ill' in previous games. This, however, was only known to the 'occasional Hitech team' (Hans Berliner and the author), and played no role in Tadjman's decision. 13. ... h6 14. Nxf7? Speculative play by Hitech, or the only rational solution? After 14. fxe6 hxg5 15. exf7 Kd7 16. Bxg5 Nxe4 17. Nxe4 Bxe4, White has a strong position but will probably lose the f-Pawn in the long run. 14. ... Kxf7 15. fxe6+ Ke8 16. Nd5 Bxd5 17. exd5 Be7 18. Rf1 Na6 19. Bb5+ Kd8 20. Bxa6 Looks like a typical computer sequence to me. 20. ... bxa6 21. 0-0-0 Kingside castling on move 18 would have been better. 21. ... Ng4 22. Bd4 Bg5+ 23. Kb1 Bf6 24. Rf3 Rb8 25. Bxf6+ Nxf6 Now the difference of a piece makes itself felt. 26. c4 Ke7 27. Rc1 Rhf8 28. Ra3 Rb6 29. Re3 Ng4 30. Rg3 Rf4 Rf2 was another possibility. 31. h3 Ne5 32. Rxc7+ Ke8 33. b3 Rxc4. Not Nxc4 because of Ka1! 34. Rd1 Maybe Rf1 has perpetual-check potential. 34. ... Rc5 35. Rxa7 a5 36. g4 Rbb5 37. Rh7 Rxd5 38. Rc1 Rdc5 39. Rg1 Rc3 40. Rh8+ Ke7 41. Rxh6 a4 42. Rc1 Rxc1+ 43. Kxc1 axb3 44. axb3 Rxb3 Now Black has to hold on to his last remaining Pawn. Fortunately for him, there is no white Pawn opposing it. 45. g5 Rg3 46. h4 d5 47. Kb1 d4 48. Kc2 d3+ 49. Kc3 Nc4! With this elegant move the black win is straightforward. 50. Rh7+ Kxe6 51. Rh6+ Ke5 52. Rh8 d2+ 53. Kc2 Rg1 54. Re8+ Kf5 55. Rd8 d1Q+ 56. Rxd1 Ne3+ White resigns.

The next edition of the AEGON tournament is scheduled to take place on 20, 21, 22 and 25, 26, 27 May 1992. I urge the authors of the world's strongest programs to take the opportunity to participate and put together the strongest artificial opposition to date. Let us make 1992 the year in which computers outplay humans in the AEGON tournament. For more information, please contact the author by mail or e-mail.



Photo by Harry Nelson

#### WHERE IS COMPUTER CHESS GOING?

From left to right:

Murray Campbell, Monroe Newborn, Robert Levinson, Jaap van den Herik, Hans Berliner and Tony Marsland.  
The Panel Session in Albuquerque NM, November 1991.