Dutch expert Jan Louwman The father of computer chess tells his story! Interviewed by Rob van Son

It is fall 1978. Jan Louwman and his wife Cobie are staying in the Dutch province Limburg where Jan settles down for a while to recover from a gall-bladder operation. They decide to make a trip to Düsseldorf (Germany) to do some shopping and to look around a bit. Before leaving the city again they take a look inside the Horten department store. Jan, who has been an ardent chess player since the World Cup match Aljechin-Euwe in 1935, sees a small machine that immediately draws his attention. The box flaunts the name Chess Champion Mark 1 and the machine literally and figuratively challenges him to play against it.



It's a tiny chess computer! Jan had once, in 1959, seen an IBM 360 computer, that took up an area of 100 square meters, carry out a simple mate in two with much difficulty. Even though it now was twenty years later, he couldnt believe what he saw. Without a moment of hesitation Jan bought the small machine for only 289 Mark, not yet realizing then that in doing so, he was laying the groundwork for a whole new turn in his life. This purchase would turn out to be the start of his development from an enthusiastic chess hobbyist into a worldwide known chess computer expert.

Often to the exasperation of Cobie, Jan used to play chess against his new computer till far into the night. But that was not all. Next, he started collecting all models that came out at the end of the seventies and made all these chess computers play against each other at different chess tournaments. Jan gained so much knowledge of the different chess computers, that he gave lectures and even demonstrated chess computers for department stores like Vroom & Dreesmann and the Bijenkorf. On 18th October 1980, the Computer Chess Association Netherlands (CSVN) was founded, with Jan as a member of the board. By organising the first Dutch Championships Computer Chess, Jan came into contact with talented chess programmers whom he would supervise in the eighties and nineties. With his many contributions to the CSVN publication Computerschaak, but also in several other magazines, the producers of chess computers soon discovered him. Jan visited several factories all over the world to test new chess computers, but also to meditate when a producer was looking for new programmers.

In the nineties he published the magazine MegaByte. The periodical existed for five years, during which sixteen issues came out. Even now in 2002, at the age of 78, Jan is still very active with his big hobby, or should I say his life-fulfilment? In his house, in his specially fitted up test-room, eleven desktop computers and seven notebooks are running constantly. Almost everyone who wants to know something about a chess computer or chess program is familiar with the telephone consulting-hour of Jan Louwman. You just can't get around him, so it's time for a retrospective view of almost 25 years of computer chess.



Jan, at the end of the seventies you were demonstrating chess computers in the big department stores. Can you tell me how that was done?

I had been playing chess for many years and through this I had made the necessary contacts in the chess world. The management of the department stores Vroom & Dreesmann (V&D) and the Bijenkorf had asked me in the spring of 1979 to organise a chess computer demonstration. At the time I worked at the environment department 'Rijnmond (a government authority) in Schiedam and demonstrating my chess computers at night in the company restaurant was no problem. Also, I borrowed certain new models from the Horten department store in Düsseldorf, where I had good contact with the manager, mister Alfeld, who knew much more about chess computers than I did. But only two years later the roles were reversed. The management of V&D and the Bijenkorf were burning with enthusiasm after they had watched my demonstrations. V&D agreed to let me give demonstrations for the public in different branches in a special stand during the Christmas holiday season. I was demonstrating at least ten or fifteen chess computers and behind me they were being sold in large quantities. I most often worked in their Amstelveen branch because the management there was very interested in chess computers.

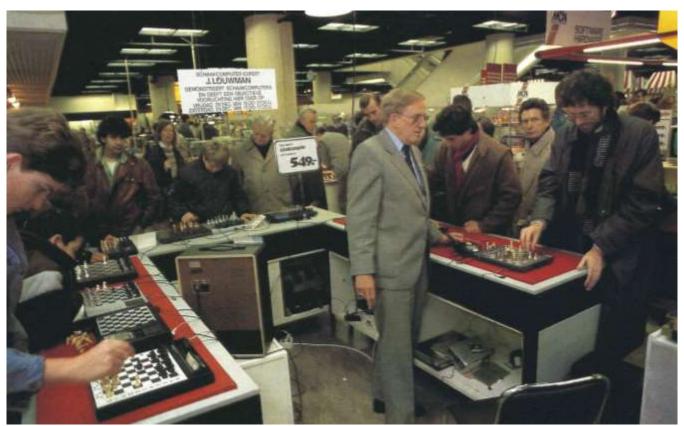
In addition, I once a year gave service training to the V&D staff, concerning the possibilities of the then very latest models. Electronics Netherlands, a subdivision of the Vendex concern, imported chess computers, so it was important that the training was continued each year. Since the eighties mister Kalkoene, at the time general manager of Electronics, intensified the contacts for the training between V&D and myself. This was partly influenced by IM Hans Böhm, who for a short while worked with them as an adviser.

You have discovered and coached many programmers and you brought them into contact with chess computer producers. Who were they and how did you do this?

Shortly after the CSVN was founded, I undertook the technical preparations and supervision of the first Dutch Championship Computer Chess (NK), held in September 1981 in Utrecht. I tested all chess programs before they were admitted. One of the pioneers of computer chess, Jaap van den Herik, is still grateful to me because I did admit his Pion program to the tournament, in spite of its rather poor performance. Ed Schröders first program was written in Basic and I did not admit it to the tournament. He is still mad about this. During the second NK, held in September 1982, I was able to admit him because by then he had written his program Rebel in Assembler.

After I had been declared unfit for my job at the environment department Rijnmond in 1981, the phone often rang several times a day. Different chess computer producers called me and said: "You in the Netherlands are the only people who do have a real Computer Chess Championship." In America, you did have something a bit like it, but that involved people from the university and the manufacturers found the Dutch programmers more suited to write programs for their chess computers.

I said: "Wait a minute. I need at least two years to coach programmers and I need a lot of test material (computers). Also, I want to get more insight into EPROM (Erasable Programmable Read Only Memory or re-programmable memory)." The programmers they had set their eyes on were Frans Morsch, Ed Schröder and Richard Lang. I didnt think they were professional enough by far, thats why I needed at least those two years.



Late 1984: Jan Louwman informs the public during a demonstration of chess computers at the department store Vroom & Dreesmann (photo: TNO magazine - February 1985)

I started with Frans Morsch, who then had a small build-it-yourself computer. He was not allowed to participate in the first two NKs because at that time you had to play three matches simultaneously using three computers, but I knew he was talented. I introduced him to SciSys (Scientific Systems, later Saitek) in Hong Kong, but they did not want him. They didnt think he was good enough, something they much regretted later on.

Manfred Hegener of Mephisto (Hegener and Glaser) from Munich had been asking me since January 1981 for a programmer, but I advised him to first hire a good expert. He took on Ossi Weiner who was a strong chess player with a rating of ± 2200 ELO and had great commercial insight.

The coaching of Frans Morsch did not last that long because he is somebody who can work much better by himself. At some point in 1981 Ed Schröder called me that he wanted to write a chess program. He borrowed a couple of chess computers from me and promised he would give me all the games. That lasted about two months, but then I got to see a jewel of a game! I coached Ed Schröder till the beginning of the nineties.



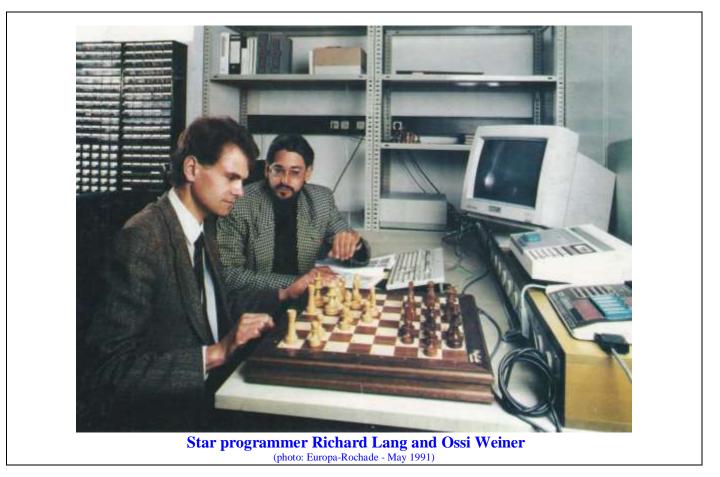
Ossi Weiner, Manfred Hegener and Richard Lang at the WMCCC 1985 (photo: Computerschach und Spiele - October 1985)

Every year Philips put up a "young discoverers" price and I was told that in 1982 a talented mathematics student was going to win the price in Brussels for his chess program. I immediately went over there to meet this student, Kaare Danielsen from Copenhagen. I had brought the chess computer Sargon and used the opportunity to test this computer against the program. I was fairly impressed by the results and Kaare asked me if I knew of any commercial opportunities for him. Next, Kaare went to SciSys in Hong Kong, without my knowledge. Despite the later good contact that I had with the big man of SciSys, Eric Winkler, he deceived Kaare after the contract had already been signed. Although it was Kaare Danielsen who had completed the program, Eric Winkler took it from him and put it on the market in the name of another employee, Julio Kaplan. Eric Winkler later told me that he had no other choice, because he was almost bankrupt.

I knew Ken Cohen of Newcrest Technologies (Hong Kong) from the Nuremberg fair in Germany and I immediately suggested that he should employ Kaare Danielsen. So it happened and Kaare did his programming from his small student room in Copenhagen, while I was testing his programs in the factory in Hong Kong. The co-operation was very successful and one of his chess computers is probably still remembered: the Super Enterprise.

In 1983, during the world championship for microcomputers in Budapest, the English programmer Richard Lang approached me. He said he no longer felt like working for Intelligent Software (of David Levy in London) and preferred a job with better conditions with another producer. I phoned Newcrest and told them I had a top-programmer for them. Since Richard Lang did not have much self-confidence, I went with him to Hong Kong. The meeting between Richard Lang and the management of Newcrest (Eric White and Ken Cohen) was a disaster, not in the least because of the unsympathetic way they made their conditions. After this, Richard collapsed completely, which was a reason for me to make a lot of fuss about this the following day. The result was that I did not get my return-journey reimbursed!

In February 1984, at the trade fair in Nuremberg, I met Manfred Hegener (of Mephisto) who asked me how Richard Lang had fared. I told him about the failure in Hong Kong and Manfred immediately said enthusiastically: "Call him up, I want him!" Frans Morsch and Ed Schröder already worked for him and so it happened that on the 1st and 2nd of March 1985 the complete Mephisto staff and the three programmers Frans Morsch, Ed Schröder, and also Richard Lang, came to my house to deliberate how they should work together from now on. Eventually we agreed that Richard Lang would program the expensive computers with Motorola processors from the 68000 and 68020 series. Ed Schröder took on the middle range with the 6502 processor and Frans Morsch would write programs for the cheaper range.



Richard Lang wasn't satisfied with the royalties Mephisto offered. I said to him: "I am organising the World Championship Computer Chess this year (1985) in Amsterdam. If you become world champion, and I dont doubt that for a second, we will state strict terms to Mephisto and otherwise we will go to the competitor." Richard did become champion! I coached him for a year and after that the then advisor of Manfred Hegener (Mephisto), Ossi Weiner, took over the supervision. I had my hands full with the further coaching of Ed Schröder anyway.

At the beginning of the nineties Wil Sparreboom of the Rotterdam firm Tasc stood at my doorstep. He was urgently in need of a programmer. At the time I was acquainted with Bart Weststrate, who was working on a promising chess program and I immediately introduced him to Wil. After the contract was signed Bart did not show up at his new employer because he no longer felt like it. Even so, Bart achieved success with his powerful chess program Kallisto.

After this disappointment, Wil Sparreboom asked me to quickly find another programmer. Luckily I was coaching the very talented Johan de Koning whom I had met earlier at the Dutch Computer Chess Championship. At the time he was still participating as an operator only. Johan worked, at first, on his chess program using an Atari computer. When I offered him to start working at Tasc, he said: "No, I dont want that, I am not capable to do that." Eventually I managed to talk him over and did he start working with Tasc after all. I coached him for a while longer, but the Dutch IM Cor van Wijgerden later took it over from me. His program The King was a big success and the commercial version, Chessmaster, was released in America.



Halfway the nineties Erik van Riet Paap, a draughts computer programmer, also started to develop chess programs. In 1994 Mephisto was taken over by Saitek from Hong Kong and the manager, Eric Winkler, was looking for a programmer for his cheaper chess computers. Frans Morsch already made the topprograms for the Saitek chess computers in the more expensive range. I thought that Eriks chess programs were perfectly suited for the Saitek chess computers. At the end of the nineties Erik had to quit there because sales were falling considerably.

At a NK in the nineties I also met Dr. Christian (Chrilly) Donninger from Vienna because he had to be in the Netherlands for his (scientific) work. He also wanted to write a chess program and eventually even quit his job to dedicate himself totally to his program. I sort of coached him from a distance for a while, but when my co-operation with the other programmers gradually dropped off, I started to intensively test his program Nimzo. Nowadays Chrilly no longer concerns himself with Nimzo, but works on his new program Brutus that runs on specially developed hardware.

Right now I am still doing some test work for the Dutch programmer Vincent Diepeveen with his program Diep and for the American programmer James Robertson with his program Insomniac. I have been working with Vincent for five years now. He has a lot of knowledge of hard- and software and always claims that his program is the best. I used to say to him: "Of all bad programs yours is certainly the best!" This is no longer true of course, for Diep has recently started to make a pretty good breakthrough and has performed well in recent tournaments.

In the past two decennia you set up computer teams that lined up against strong players of different chess clubs. How did you organise all this?

During my telephone consulting-hour several people called to ask me if I would play with a number of chess computers against members of their club. At the beginning of the eighties the chess computer was just starting to make its advance and many chess clubs saw it as a good promotion if a computer team crossed swords with strong club players. In those days many people were interested in chess computers and therefore such an event could also generate new members.

Of course I already had many contacts in the chess world and moreover I had a large collection of chess computers at home. So setting-up a chess computer team was no problem, no more than finding enough operators to work the machines. In 1984 I set up my computer team ROM84 and we played 4 to 5 matches a year against different chess clubs. In principle we received no pay, but if the club could afford it, the operators were compensated for their travelling expenses. Usually this meant that a well-to-do club member was willing to pay these expenses. I continued playing against chess clubs with my computer team until about 1994. In the eighties we used dedicated chess computers and from the early nineties, when the sale of chess computers showed a strong decline, primarily notebooks with chess programs.

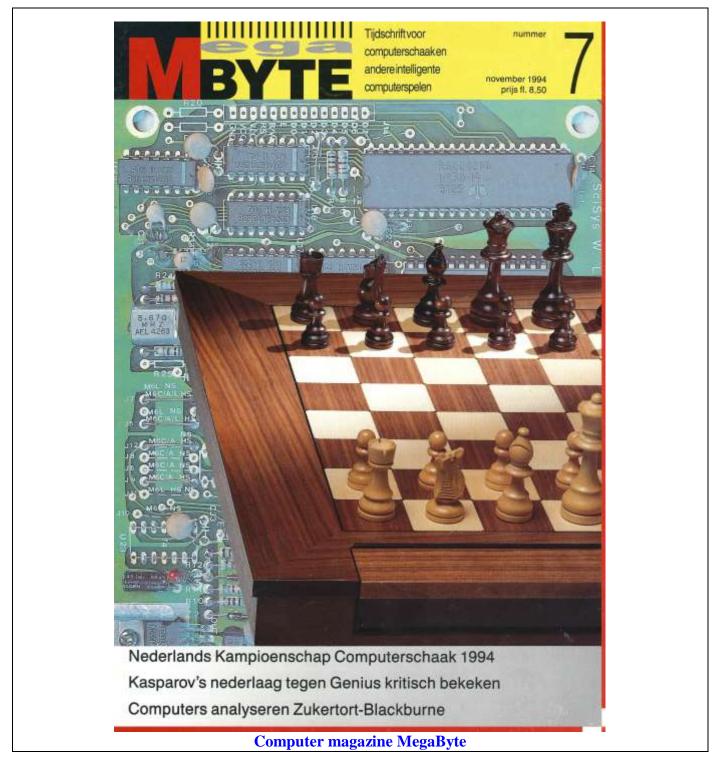


In 1994 I set up a new computer team, which I named after my computer chess magazine 'Megabyte', the magazine I had started the year before. With the Megabyte team we also played against different clubs and even now we each year play one match against the oldest chess club of the Netherlands, Messemaker 1847.

Can you tell me a little more about the computer magazine Megabyte that you founded?

Beside my telephone-consulting hour, I gave advice on chess computers in the KNSB (Royal Dutch Chess Association) magazine Schakend Nederland (now Schaakmagazine) for 10 years. At the time members of the association could buy there several kinds of chess computers against a reduced price. When the KNSB stopped selling chess computers in 1993 and I therefore no longer could give advice in their magazine, I thought this was a bad thing, both for the consumers and the manufacturers. Besides, I did not have such a good understanding with the then editor of the CSVN magazine Computerschaak for which I had been writing since the foundation.

The big boss of Saitek, Eric Winkler, phoned me to ask if I would like to start a new computer chess magazine, with him taking care of the financing. He also wanted to know if I would be willing to start selling his computers as well and continue my telephone-consulting hour. At first I did not feel like selling his chess computers, but because of the bad situation that had developed, I agreed to his proposal.

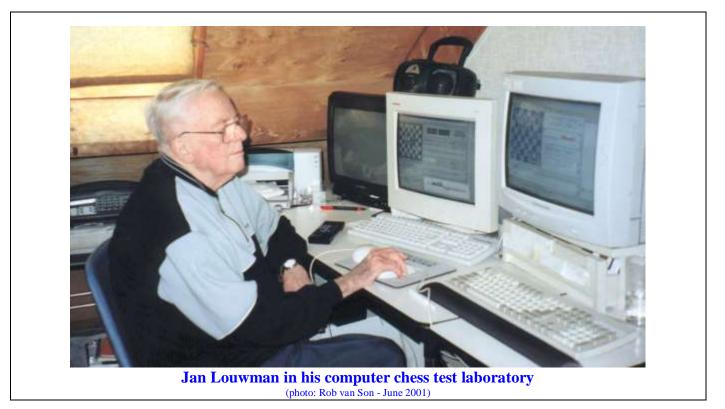


The number of subscribers grew fast because I gave away a free one-year subscription to anyone who bought a computer from me, but I also handed out the magazine during the many Megabyte computer team matches. At the same time the importer of Saitek, Electronics in Amsterdam, promoted my magazine when people bought a chess computer there. In all Megabyte had about 500 subscribers, but that included a great number of free subscriptions that were only partly continued as paid subscriptions. After a few years the sale of chess computers fell off more and more and Electronics decided to stop importing them. This meant that Saitek would no longer subsidize my magazine and that I was also forced to stop.

Jan, it has been 25 years since the appearance of the first commercially available chess computers. Do you think that all the work you did in de past years for the computer chess world has borne fruit?

During his many meeting with me Eric Winkler of Saitek often remarked: "If it had not been for Jan, there would not be half as many chess computers in this world." I am convinced that without me some top-programmers would not have reached their current high level.

The way it was for the dedicated chess computers in the beginning of the eighties up to the beginning of the nineties has never been equalled, not by far, by the PC chess programs. As far as playing power is concerned yes, but definitely not with respect to sales. Dont forget that back then fifty thousand chess computers were sold per year against only four or five thousand now, including chess programs. And the sale of chess programs is still falling.

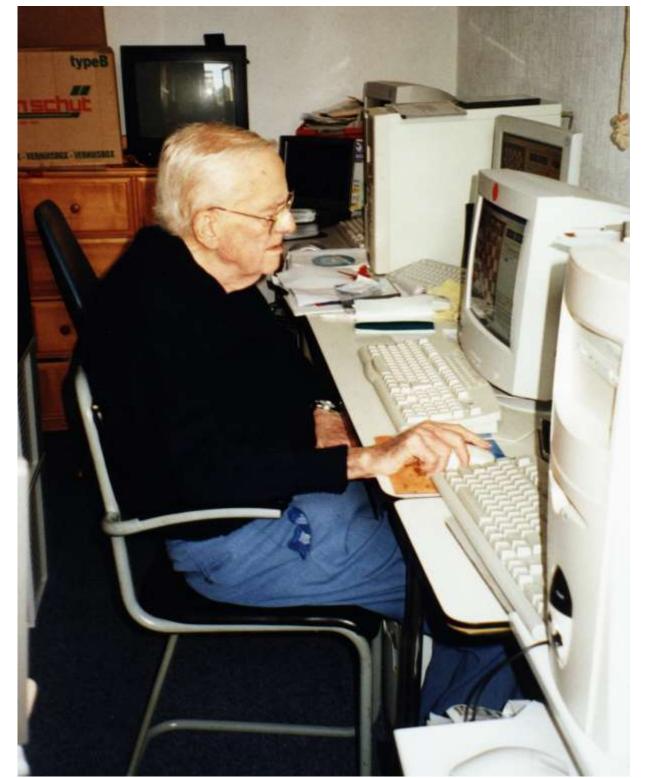


These days you still carry out a lot of test-work with different top chess programs. Can you tell me how this works?

I observe for instance how a new version of a chess program plays against older versions or against other top-programs. I test this by playing several tournaments with different clock times. I let all the programs play automatically against each other. The engines of the ChessBase programs can already play against each other, through the built-in auto player of the chess program and I can test the other non-ChessBase programs by connecting two PCs with a so-called zero-modem cable. With the help of special drivers in the chess program and the Windows operating system several matches can then be played automatically. I also use different versions of Windows because a given program may show faults under Windows XP, but run perfectly well under Windows 98.

Following a tournament I look at the matches played. I dont replay them all, but I especially observe which of the games ended quickly. This way I can see whether there are certain bugs in the program and where a particular program is specifically good or bad at. The evaluation function shows a strong change with certain positions. I select these games and study them more closely. If my technical knowledge of chess fails me when trying to find out why the evaluation changed this much, I can ask advice from a number of top-chess players. Such a top-chess player may for instance say that a particular move is no good, but my experience will then tell me that the mobility of the chess-piece needs to be raised or lowered by the programmer.

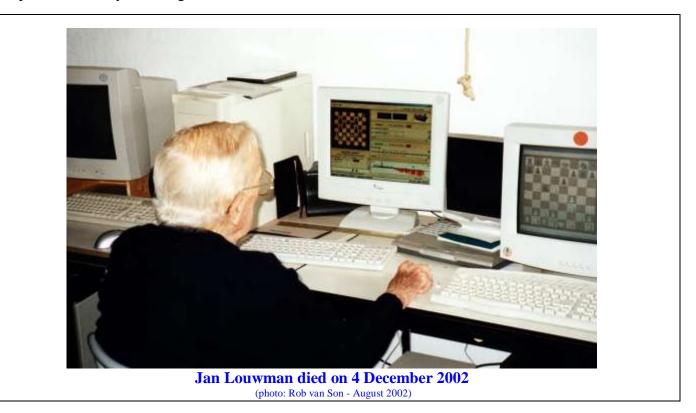
Next, I pass on these matches with my comment to the programmer and he effectuates the changes in the program. Suppose the mobility of the knights needs to be raised somewhat, then it is important that the programmer changes this very accurately, because otherwise the bishops may become too passive for instance. If this is not done very precisely, the improvement usually will make things worse at the same time. Because of my many years of test experience I dont often have to call in the help of the top players. There are actually two goals you have for your testing: "Tracking down bugs in the chess programs, and the final results the programs achieve at the end of the test tournaments played." Generally speaking you might say that most programs are not very particular when it comes to the kings safety.



Jan invested a lot in computers with always the latest soft- and hardware (photo: Rob van Son - August 2002)

If you could look into the future, how do you think the computer chess world will look in the year 2010?

I am quite pessimistic about that. Computer chess will still be there, but commercially it will be a problem. Nowadays an incredible amount of software is copied illegally and at long run this will be at the expense of the programmers. One day, they will no longer be available. Also, I dont like the development where six top-programmers work with one firm (ChessBase). At the moment, the sale of dedicated chess computers is already a sinking business.



What are your plans for the next few years?

After I was declared unfit for my job in 1981, I totally dedicated myself to computer chess. This kept me going and even now I will keep on devoting myself to computer chess, as long as my health permits. The many telephone calls I daily receive from the public demonstrate that there is still a great need for good advice. With my test-work, I anyhow hope to be able to contribute to the improvement of the top chess programs for now and in the future!

Author: Rob van Son, September 2002. This article was previously published in the computer chess magazine 'Selective Search' issue 103 (Dec. 2002-Jan. 2003), by Editor Eric Hallsworth.

Internet

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