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TWINKLE CHESS

Before Science became scientific, there was a simple rule: "Nature abhors a vacuum". This, it was justly remarked later, explained nothing and one had to wait for scientific Science until it became clear, by much more involved reasoning, why nature abhorred a vacuum only to the tune of a column of ten meters of water or three feet of mercury.

In the same spirit, now that we all have gone scientific, there is not only a definite interest in the phenomena, in what happens in the world, say the world of computer chess; at least as much interest attaches now not just to what is observed, but to *why* it should be observed. For anything newly discovered, a spate of theoreticians rush in, doing away with such simple things as the horror of a vacuum, explaining it. Explaining it? Yes, if one prefers involved arguments with Science to unscientific statements of bald facts.

As is abundantly clear from this issue of the Journal, the spectacular success of Fritz3 at speed chess is one such bald fact of life, of which Grandmasters may well feel a horror. Explanations, though, are far to seek and the Grandmasters, soundly trounced, rush most unscientifically into excuses. Even the designer, Frans Morsch, concurs: it is really beyond those Grandmasters to click a mouse smartly. Not so, we maintain.

Other explanations offered for the program's success share the weakness of being in the nature of excuses. The losers argue that the computer is relentless, persistent and graceless, ever ready to pounce, inexorably punishing the slightest oversight.

There is no denying that some truth may be in what the losers adduce, but your Editors believe that the victims in speed chess have blamed the wrong agent. With unwonted seriousness, this Editorial will argue that human beings, even the élite of them known as chess Grandmasters, have wilfully placed themselves at a disadvantage by consenting to play speed chess at all.

It all boils down to the answer to a double-barrelled question: what can one do in the twinkling of an eye? The answer to that query is, when one is a human being: very little. What can a moderately slow computer, such as the Pentium, do in the twinkling of an eye? The answer is: validly evaluating about 50,000 nodes. And here lies all the difference.

Theories of human visual perception are not conspicuous for the consensus they have reached in explaining what goes on when we humans use our eyes. Yet, they all are agreed that it takes roughly half a second before we truly perceive what we see. This is the experimental latency which we express poetically by 'the twinkling of an eye'. The computer has no such delay, no latency gaping between perception and action.

Now consider a speed game at five minutes for 40 moves (i.e., at 7.5 seconds a move) and the much-vaunted hardware which will allow, in 1994, 750,000 nodes to be searched in that interval. As compared with 1989, only five short years ago, this is what Deep Thought searched for a move and Deep Thought, even then, we all know, was a formidable opponent. Next, let us enquire into a human being with considerable visual latency pitted against the then Deep Thought. Due to his unavoidable latency (and the psychological stress it no doubt induces) we human beings are now at a disadvantage. What is more, it turns out that we voluntarily increase our handicap as we reduce the time allotted to a move, a reduction which seems imminent in next year's version of the Dutch Rapid Computer-Chess Championship.

The engines going for ever-more-rapid chess need fear their opponents less and less for the simple reason that, the faster the moves, the greater the deleterious impact of the latency on the human being. We are not surprised, therefore, that Kasparov, who at six minutes to the computer's five had crushed his opponent when he put his mind to it, promptly lost when, in a public show, he saw his own time allotment reduced to four minutes... He who delivers himself to the computer by imposing high requirements on his own visual agility must not be surprised if the computer mercilessly devours the champion who has foolishly surrendered his edge.

And while we are on this subject of speed, where, in the extreme, the human being is without a sporting chance against a program, let us try to agree on a terminology. In three months of consulting the chess literature on which we ultimately depend, we have encountered too many terms for the faster-than-normal execution of moves, none of them satisfactory. Rapid chess? What rapids are you shooting? Speed chess? Does anyone remember the instruments once known as high-speed printers, if you please, not just speed printers, churning away at two lines a second? Speed chess, again? Speed is a drug many people unfortunately have become addicted to. Blitz games? Some of us, old enough to be aware of the Second World War, find that 'blitz' has most unfortunate connotations: after the blitzkrieg miscarried, London was blitzed. Seeing the importance of the time we spend in twinkling our eyes, may we suggest 'twinkle chess'?

Bob Herschberg
Jaap van den Herik

Hail and Farewell

The Editorial Board welcomes Ms. Tons van den Bosch in her new rôle of Desk Editor, in part providing some of the services formally entrusted to the Deputy Editor, but charged with other specific tasks as well. The Board is fully confident that Tons will competently discharge her duties, the more so since she is already experienced in the production of the Journal in her previous functions as Editorial Assistant and Editorial Manager.

The Editorial Board regrets the resignation of Dr. J.W.H.M. Uiterwijk as Deputy Editor of this Journal, effective as of the next issue. Jos Uiterwijk has decided to exchange the onus of his Deputy Editorship for a larger participation in the scientific and tutorial activities of the Department of Computer Science of the University of Limburg. In his task as Deputy Editor, Jos has been active for 23 issues, for which effort the Board is duly grateful.