

## THE SIXTY-FOUR-SQUARE HEGEL

They have deigned to meet: Deep Thought was not below Kasparov's notice and the outcome was not even in doubt. Deep Thought deservedly was crushed. Yet it is worth noting that Kasparov – and who needs reminding that he is the current World Champion – went on record for having studied 50 games of his opponent to be. This, in itself, is a more telling piece of evidence for Deep Thought being a worthy opponent than any other we could conceive of.

We have now reached the stage, your Editors believe, where the human thesis of chess meets its antithesis of computer chess, possibly leading to a synthesis combining the best of both at a level beyond the reach of the original contestants. Such terms may sound offensive to many of our readers who believe this sort of language is purely Marxist. And is not Marxism being disproved over ever more parts of the globe in these tumultuous times?

Not so. The tripartite treatment of thesis, antithesis and synthesis is not Marx's at all, it is the intellectual property of a perfectly respectable and very *bourgeois* philosopher, the much respected, old-fashioned Hegel (1770-1831). Even so, Hegel or his plagiarist Marx notwithstanding, we are living in tumultuous days, from which we hope that some *synthetic* stability will emerge. Surprise meets with surprise: not only does Kasparov consent to meeting a silicon-and-gold adversary, we also have the most surprising statement to come out of FIDE ever. Let us quote literally from our page 260: "FIDE fully supports the research efforts to improve the playing strength of computer-chess programs which are being undertaken in various parts of the world."

Shifting off our Editorial chairs, we feel that a potential point of synthesis is the perfect occasion for looking back.

In human chess, there is only one reigning Champion. In computer chess we feel that there are at least three to deal with: apart from the human champion, and, of course, next to the programmed champion, we have the Champion Programmers of old who have stood at the cradle of the ideas now happily approaching a synthesis. They have, by an intellectual effort now difficult to reconstruct, taken the leap from very primitive machines into the deep and troubled waters of programming chess. It is no more than fitting that this issue of the Journal commemorates and records the efforts of pioneers more often quoted than read: John McCarthy and Claude Shannon. Both of them were honoured guests at the Edmonton, Alberta meeting which has its apotheosis in this issue.

In passing, we smilingly recall that computer-chess history does not repeat itself, but has a surprising habit of reproducing coincidences. The semi-divinities we commemorate met in Edmonton: the happy coincidence is that they cooperated before, both being Editors of the *Proceedings* of the 1956 Dartmouth Conference, justly seen by most of the workers in the field as the founder party of *Artificial Intelligence*, but then more modestly titled *Automata Studies*. Your Editors see tumultuous times ahead. In spite of this, they are happy to discern, albeit dimly, a time of synthesis.

Bob Herschberg  
Jaap van den Herik