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BY ANY OTHER NAME

The only trouble is that they keep changing their names.

Gone are the days when a Lasker arose and held sway for some thirty years at least, still being known as our dear Doctor Emanuel Lasker. Without alluding to changes of name with more serious overtones, the computer-chess world is now in the throes of a fit of voluntary eponymy. What was Blitz, good old-fashioned Blitz as in blitzkrieg, returned the next year as Cray Blitz, possibly due to a morganatic marriage in which it is not clear whether it was prince Cray and Miss Blitz or the other way round. And of course, it is hard to think of an unsexier name than ChipTest, even with the capital T to tart it up. Someone must have thought of libido surely, when it reappeared as Deep Thought, alluring even to those who have not seen the movie Deep Throat it is so reminiscent of.

And as though changing names by itself were not sufficient to create confusion, changing views are added. Once upon a time, there were three broad streams of view. There was the Olympian school of thought, gods one and all, who scoffed at the electronic vermin below them. When one of the lesser godlings occasionally and perhaps secretly sniffed the bottom of those busy chipmunks, he did not care much for the odour and concluded that the poor creature would never outgrow its playpen. And collectively, of course, the Olympians, with a fine, hasty assurance, simply ignored the lesser breeds.

Those mundane enough actually to deal with chess computers, to program them, to evaluate them or even plain to enjoy them, belonged to two rival factions, let us call them the cerebral and the muscular. The cerebral school strove for more reasoning, a deeper rationale to be instilled into the unsentimental hardware. They longed, so to speak, for the beauty of a computer's thought to be comparable to the richness of the musings of a Grandmaster. They were strongly and, for a time, convincingly opposed to the muscular sect. The latter might be heard to mutter the old saw about God being always on the side of the strongest batallions and proceeded apace to construct ever heavier engines. Thoughts of beauty were rigidly excluded: nodes per second were all that counted.

Those were the good old days when thought streams were still clearly separated: there was no merging of the waters. In the present day and age, barely a brace of years later, consider what happened. We are honoured to welcome no fewer than three Grandmasters as contributors to this issue: verily, the gods have descended from Olympus and deign to take notice. Moreover, one Olympian has now been vanquished by silicon. This issue reports in some detail about the honourable but decisive defeat suffered by Bent Larsen at the hands of Deep Thought. It also records Larsen's off-the-cuff comments when interviewed after his defeat.

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Once there was an honest journeyman computer named Chess Challenger, after a speed-up promoted to Mach I, then to Mach II and now back to Chess Challenger again. Occupying less than half a square meter, it squats comfortably, as befits a true micro, on any desk top, and will set you back, all told, less than you spend on the upkeep of your motor car. Yet, at one breath-taking moment, it drew up to Deep Thought and even threatened to overtake it, all this while Deep Thought relied on very heavy machinery indeed, which you could never afford.

The article by Anantharaman, Campbell and Hsu which opens this issue makes for fascinating but definitely not light reading. Its candidness about techniques is as unusual as it is scientific. The way your Editors read it, there is not only confluence between human Grandmaster chess and the top of computer-based chess-playing, there is also, it appears, a convergence between the muscular and the cerebral approaches to machine playing. ChipTest that was, and Deep Thought that is and is to be, while undoubtedly relying on brute force, still move closer to the strong human player in the following sense. While predominantly muscular, the singular-extensions technique so modifies the brute-force approach that, in the authors' words, "it also provides a rough intuitive model of human players". The human Grandmaster, it is known, produces deep and narrow search trees; so, almost as a side effect, do the singular extensions when added as a refinement to heavy-handed mechanical searching. True, Deep Thought still searches a tree much bigger than the ones explored by human players, but there is convergence because the trees do get smaller than the bushy and thorny ones produced by rude mechanics and there are more nodes with a single descendant. Those single-offspring graphs are presumed to be much akin to those searched by human players. Thus the muscular tend towards the cerebral, an unexpected but welcome *rapprochement.*

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