## TABLE OF CONTENTS

Table of Contents	179
Going on while going up? (I.S. Herschberg and H.J. van den Herik)	179
Dues, Membership and the Next World Championship (M. Newborn)	181
Interior-Node Score Bounds in a Brute-Force Chess Program (D.J. Slate)	184
Uniqueness in Game Trees (A.N. Walker)	193
News, Information, Tournaments and Reports	203
The Fourth World Microcomputer Chess Championship (M. Newborn)	203
ACM's Fifteenth North American Computer Chess Championship (NACCC)	
(T.A. Marsland and K. Thompson)	210
Chess on Non-Standard Architecture (T.A. Marsland)	216
Netherlands Computer Chess Championship 1984 (J.J. van Oosterwijk	
Bruyn)	218
The Truth about their Strength (G. Grottling)	221
Computer vs Computer via Computer (T. Breikreutz and J. Schaeffer)	226
Youth Team versus Computer Team (L. Lindner)	228
To our Swedish Readers (The Editorial Board)	229
Make Sure The Journal Reaches You	230

## GOING ON WHILE GOING UP? An Editorial

The half-decade before us, 1985-1989, bodes well to furnish a decisive moment in the development of computer chess. The quinquennium ahead will, no doubt, see playing strength proceed. In Breikreutz' and Schaeffer's contribution (pp. 226-228) it is suggested that correspondence chess may well be a first area in which silicon conquers the grey matter: it is argued that a computer is handicapped against humans by its irritating slowness; once the constraint of having to generate a sensible move every three minutes is lifted, thus the authors, the advantage is clearly the computer's. When allowed up to 35 hours to answer a move it cannot fail to be superior, so the argument runs.

Implicit in the argument is the idea that "bigger is better". This idea is hotly disputed, not only by those who preach "small is beautiful", but also by those pointing out the failing of mere brute force: to them, a ply gained is far from being a game won. In this context, some form of standardization is obviously desirable. A's algorithm, when run on A's machine at a Megahertz clearly outperforms B's algorithm, run on B's machine at b Megahertz. This in itself is, perhaps, a noteworthy fact in a non-standardized world and many such facts have been recorded by Grottling in this issue (pp. 221-226).

Standardization would involve running A's and B's programs on a neutral machine, C, which may be at many removes from A's and B's pet hardware. The Editors are glad to have learned that such a scheme is under way. Jonathan Schaeffer and Tony Marsland have issued a call for programs to be run uniformly on reasonably standard hardware, a VAX 11/780, and to be thus compared. While anticipating the howls of indignant programmers, complaining that less than justice will be done to their favorite trickery, we heartily endorse the first step towards standardization.

This naturally leads into the matter of the wide disparity in forces fielded. Can one really run a home-grown tortoise of a fraction of a Mips against a 16-processor Achilles? Is not the result foregone? Our answer is: after standardization it need not be: the tortoise may be shown to be somewhat cleverer after all.

The disparity of forces brings us to the distinction between the commercial and the non-commercial. In our view, this distinction is tenuous at the best. Some academic programs run on the fastest processors now achievable, some commercial ones must be economic and have to make do with a miserable handful of Mips instead of a Gigaflop or so. Should we then condemn the academics for their brawn or relegate the commercial ones to the outer darkness for trying to earn an honest dollar?

Editorially, we hold we should do neither and continue to publish results achieved by pure or impure hands on pure or impure hardware, without of course giving up a proper balance between brawn and brain. As one of our contributors sagaciously remarks (p. 204): "Who ever heard of a "commercial" auto race? All cars that race are souped-up versions of their commercial namesakes." In the same spirit, this Journal will continue to report progress without fear or favour, neither daunted by the Megaflop nor overly lenient towards the miniMips, so long as the results bear on the progress in our critical half-decade, during which, we feel, it will be decided whether computer chess will stay at plateau or play the stars.

Bob Herschberg and Jaap van den Herik