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SCIENCE AND NEWS

The scientist and the journalist agree: the border region between science and news is as large as the difference between man and woman. In his book *Science and Hypothesis*, Poincaré stated: “Science is built up of facts, as a house is built of stones but an accumulation of facts is no more a science than a heap of stones is a house.” News is usually characterized by ‘what recently happened’, but in relation to science we are inclined to think of news as a new fact. In our games world, this could be a new game, although the usual meaning of news such as recent tournament results more frequently applies. Closely related to the introduction of a new game, which we regard as news, we sometimes deal with a new strategy, which we regard as science. Hence, the difference between science and news may not be as large as the scientist and the journalist thought when they agreed on the border region.

Usually the news sinks in properly, while science faces hard times as it is difficult to understand and to internalise. The power of the *ICGA Journal* is that it serves two groups: the scientists and the group of interested news readers. Although right from the start we have divided our Journal into two parts: the scientific section and the news section, the Editorial Board understands that both sections are fully interwoven.

Let us start with the big news from the scientific section. In the first contribution of this issue Nathan Bullock informs us that he has solved the game of 10x10 Domineering. That is quite a performance. Moreover, he provides a clear description on how an adequate combination of knowledge from the domineering area can help the search process to solve many other open questions. The results are impressive and tabulated in an updated chart of these boards for which the game theoretic values are currently known.

Not every scientific breakthrough results in a problem being fully solved. Mostly it is the reverse as science is a collection of small building blocks. Therefore we are proud to publish the first article on the use of FPGAs (Field Programmable Gate Arrays) in chess programs. It is written by Marc Boulé and Zeljko Zilic. However, they are not the first researchers who implemented the FPGA technique as successor to the IC (Integrated Circuit) and ASIC (Application Specific Integrated Circuit) techniques in a chess-playing program. The experimental priority claim comes from the programming team BRUTUS, headed by Dr. Chrilly Donniger. In their program, the authors successfully incorporated the new technique, but since they work commercially with

ChessBase they have not published anything on the matter so far. Obviously, BRUTUS' third place in the World Championship in Maastricht was a telling announcement of the new technique.

Crossing the border area between science and news we arrive at the scientific releases of the news section. Here we find the descriptions of two new games, viz. Octi and Clobber. Octi is well described by Charles Sutton and Clobber by Ingo Althöfer. The latter game has little-brother games which have already been solved. Moreover, the programs developed so far for the standard games of Octi and Clobber are said to play on expert level and above.

In a sense the report on Entertainment Computing by Hiroyuki Iida is a breakthrough too. It enlarges the scope of our games world and paves the way for further research in the application domain of computer games entertaining human beings. Clearly, we are now on a borderline of the news section and we should not inadvertently pass by the real news of GEKISASHI's World Championship in the game of shogi. It is given its due by Reijer Grimbergen and the Western world cannot but agree that shogi is quickly approaching the tournament record of the computer-chess world. Experts have told me that over the next ten years the playing strength of shogi programs will increase to a level comparable to that of the best chess programs of 2002. That is big news, especially if it comes true. It would mean that within ten years this news will be in the science section.

In summary, we conclude that science and news can be clearly distinguished by the laymen, but are less clear cut to the experts. They are fascinated by the many interconnections that turn news and science into one smooth and exciting research area.

Jaap van den Herik

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