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## THE INTERPRETATION OF RULES

The origin of computer chess is – as we all agree – in von Kempelen’s TURK, for the first time presented to Maria Theresia at the Court in Vienna in 1769. After this occasion we have seen many developments in the form of (a) successors such as AJEEB and MEPHISTO, (b) novels on the topic, for instance by Edgar Allen Poe, (c) the development of mechanical techniques (cf. Babbage and Torres y Quevedo), and (d) computer technology (from Shannon to the performances in the Olympic Oval). Primarily, we see inspired and inspiring scientists standing on each other’s shoulders to design an even better device.

Scientists have the duty to publish their findings while for commercial ventures it is debatable (cf. the Microsoft case in the European Union); only competitors for the World Computer-Chess Champion title may have their secrets. Yet, in the latter case we enter a difficult area. Clearly, a stolen program should be excluded from competition. This is rather simple (at least in theory). A software program is tangible or material, and so it can be traced, but how about ideas? They are vague and sensible, but also understandable and many times implementable. Is there a copyright, a patent, or another legal security issue? And how would our community deal with it?

As a Tournament Director, I have experienced several of the issues mentioned above. In the 9<sup>th</sup> World Microcomputer Chess Championship (Portorož, 1989), the program QUICKSTEP by Mr. Langer was excluded from further participation after four rounds. The reason was that the program was “an unauthorized version of the MEPHISTO ALMERIA program” (cf. *ICCA Journal*, Vol. 12, No. 4, pp. 232-236). In the 11<sup>th</sup> WCCC (Graz,

2003) the author of the program LIST refused inspection of his program code and was banned from the tournament for precisely this reason (cf. *ICGA Journal*, Vol. 26, No. 4, pp. 252-259).

Over the years the Board of ICGA have learned their lessons, but nevertheless they stumbled into a new case in the 14<sup>th</sup> WCCC. The story is too long for an editorial, but it is indicative for the attractiveness of computer chess and for the desire to achieve a top position in that world.

The LION++ 1.5 team made use of Fabien Letouzey's program FRUIT. FRUIT is composed from open-source software and it unexpectedly finished in a second place in the 13<sup>th</sup> WCCC in Reykjavik, Iceland, last year. The LION++ 1.5 team members are honest people, they had checked our ruling with their legal advisors. It deals with rule 2 (see Vol. 29, No.1, p. 48) that states: "Each program must be the original work of the entering developers. Programming teams whose code is derived from or including game-playing code written by others must name all other authors, or the source of such code, in their application details. Programs which are discovered to be close derivatives of others (e.g., by playing nearly all moves the same), may be declared invalid by the Tournament Director after seeking expert advice. For this purpose a listing of all game-related code running on the system must be available on demand to the Tournament Director."

In the tournament report (pp. 83-93) you will find that one of the participants made a protest against LION++ 1.5. After inspection by Yngvi Björnsson and later (independently) by Jonathan Schaeffer it was clear that the code was similar to Letouzey's. However, the remarkable thing was that the LION++ 1.5 team members did not deny this fact, but pointed: (a) to the credit for Letouzey as mentioned in their files, and (b) to all the newly developed routines which surrounded the ideas by Letouzey. Their interpretation of rule 2 diverged in three aspects from my interpretation. The aspects are: (1) original work, (2) application details, and (3) close derivatives. I discuss the three points briefly below.

(Ad 1) "original work of the entering developers". If they had included Fabien Letouzey (with his permission) in the list of authors, there would have been no concerns. Since they had not done so, the discussion was on "original work". Clearly, the main part of the program LION++ 1.5 was not their original work. However, rule 2 had five more lines, which the team perceived as an explanation of the notion "original" (see ad 2 and ad 3).

(Ad 2) "must name (...) in the application details". The LION++ 1.5 team had interpreted "application" as 'program' and therefore they had included a file crediting the effort by Fabien Letouzey. Well done, but invisible for other people. Of course, the ICGA board had meant the 'submission form' should contain these names and credits. Then they could decide whether they would admit the program.

(Ad 3) "to be close derivatives". Here the legal question arises: what is meant by "close". The chief arbiter of the human Chess Olympiad, Geurt Gijssen, who has ample experience with World Championship matches, was consulted for interpretation. He pointed to the fact that when 'close' would mean "over 80 per cent", it should be stated that way. Yet, the interpretation by Björnsson and, independently, by Schaeffer was that it was "a close derivative".

For long-standing members of our community – we assume – the above the interpretation of the rules is clear. In Turin, the ICGA had the pleasure to welcome some new members who became three-year members according to the rules for participating in a WCCC. So far, we believed that the three-year rule was a rule for the continuity of the membership, now we know that this rule should be interpreted as a rule for familiarisation with the ICGA community.

Disregarding the LION++ 1.5 misinterpretation of the rules, the Turin event was wonderful and the pages of the second half of the Journal report colourfully on these events. However, with so many reports we had to postpone some of them to the September issue of which the scientific part will be dedicated to the game of Poker.

Jaap van den Herik

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