

ADJUDICATIONS IN COMPUTER TOURNAMENTS

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One area of contention in computer chess events is the question of adjudication. Should computer vs. computer games ever be adjudicated, and if so, under what circumstances, by whom, and how? The whole area is fraught with problems, but I feel that the time has come for the ICCA to draw up guidelines and rules to cover the eventuality of adjudication. The purpose of this article is to summarize what I see as the difficulties and to make some suggestions which might serve as the groundwork for the ICCA. In view of an impending World Championship in October 1983, it would be advisable to firm up on the rules for adjudication before then.

Should Games Be Adjudicated At All?

The simple answer to this question, in an ideal world, is "No". The object of the exercise is to see what happens when the two computers slug it out. We have so few computer tournaments that there is relatively little opportunity to see how the computers play endgames, and adjudication deprives us of some of these opportunities. Nevertheless, under some circumstances there is no alternative.

The most pressing reason for adjudicating a game is that the next round is soon going to begin, and the result of the game must be known for pairing purposes. In this situation I would be in favour of having the T.D. make a provisional adjudication, for pairing purposes only, and then adjourn the game until later, when the two computers can continue at their leisure.

Another reason for adjudication is that (in the case of mainframes) one or both of the contestants is unable to continue because his computer is going down at a certain time or is required for some less important task. Allowing an adjudication for this reason seems to me to give some kind of bias to those whose computers cannot fulfill their obligations and play the game out to the bitter end, but I accept that such curtailments are sometimes necessary.

An inadequate reason for adjudication is that the human operators, and/or the T.D., are too tired to stay up all night. I would suggest that in future, they be made to. If the computer is still playing, the operator should still operate and the T.D. should still direct (or if he must retire to bed, he can be reached in an emergency). When both computers are on site, or both are available all night, the game should continue to its bitter end. In my opinion, games should only be adjudicated if there is no other way to finish them normally during the time frame of the tournament.

How Should Games Be Adjudicated?

There was a time, a few years ago, when games would be adjudicated in the light of the T.D.'s knowledge of the programs' respective abilities. A program faced with a theoretically won game, such as bishop and knight and king vs. lone king, would be given a draw on adjudication if the T.D. knew that it was unable to win when left to its own devices. Since those

days, chess programs have become much stronger, and we now adjudicate on the basis of "perfect play". The next question, then, is who should determine what result should occur after perfect play?

Who Should Adjudicate?

If the result of the game, assuming perfect play, is absolutely clear, then the T.D. should be authorized to adjudicate instantly. This should be the case when one side has an overwhelming material advantage or when the game is a theoretical draw, as shown in the endgame books. (It would be a good idea for the T.D. to have the most important endgame books to hand during a tournament.) The problems arise when the position is not so clear.

Adjudicating a game when under time pressure or when tired is not easy for any T.D. Analysis of a chess position is far easier when two or three strong players are looking at it, since it is then possible for one strong player to take the white side while another does his best for black. So there is some argument for having two players, of approximately equal strength, adjudicating a position. But in practice this might be difficult to arrange.

An important question is whether or not the computer operators ought to be allowed to take part in the adjudication analysis. From an objective point of view, anyone who can help the adjudicator(s) discover the truth about a position should be heard. On the other hand, it has been argued that if one of the computer operators is much stronger than the other, then the program with the stronger operator has an advantage. I would argue that it is unfair to discriminate against a program because its operator is a strong player, and that under certain circumstances the operators should be given the option of taking part in the adjudication process.

Bearing all the above points in mind, here are my suggestions regarding how a game should be adjudicated and by whom:

1. Ideally, there should be three adjudicators: two strong players and the T.D. (who should also be a strong player). After analyzing the position, there must be a majority decision.
2. If there are not three strong players available, the T.D. should try to find the services of a second strong player. Each of them should take one side and try to agree on a result.
3. If no other strong player (who is outside the tournament) is available, the T.D. should adjudicate alone.
4. In any of the above three cases, each of the operators should be allowed a couple of minutes to make suggestions prior to the adjudication, but must then remain silent, although allowed to watch the analysis.
5. If an operator disagrees with a verdict, he has a certain amount of time (say 12 hours, or less if the next round is the last round of the tournament) in which to lodge an appeal which must be supported by written analysis. The appeal must be accompanied by a deposit (say \$25 or \$50), which is returned if the appeal is upheld, or given to the ICCA if the appeal is rejected.

6. If the adjudicator(s), after due consideration, cannot be certain beyond a reasonable doubt, then the benefit of that doubt should go:
- a) to the player whose computer is available to finish the game, if his opponent's computer is not available to finish the game;

or

 - b) if neither or both computers are available, then the benefit goes to the player who is ahead on material (if any), or if material is level, the result is a draw.

ICCA Activities for 1983 (continued from page 2)

I am, therefore, asking that nominating petitions be prepared and mailed to me for the positions of President, Vice President, and Secretary-Treasurer. Since we expect to hold the Triennial Meeting on Monday, October 24, 1983, petitions will be accepted until July 24, 1983. The ICCA Newsletter published in August of 1983 will announce the final slate of candidates, and the election will take place during the Triennial Meeting.