To all members of the Editorial Board

As you know, Bernard Meltzer is retiring soon, and the Journal needs a new Editor. Perhaps this person will be one of us, so I enclose a little memorandum which argues a new way of organizing the business of the Journal. I would recommend to whoever takes the job that he or she considers the scheme carefully as I believe it has some considerable advantages over the present set-up.

If anyone has comments on the ideas I would be delighted to hear them.

Pat Hayes

Enc.
The Journal does not seem to be in very good shape at the moment. In spite of the increasing volume of AI work around the world, there is a dearth of good quality submissions. It seems that the Journal has not established itself as the authoritative medium for publication of AI work. I believe this is because it has not yet developed a clearly defined style, in spite of having been the only international journal in the field for several years.

There are basically two ways for a journal to succeed: an all-comers policy, or an excellence policy. In the former, one's main aim is the rapid publication of interesting papers; in the latter, one aims to maintain a high intellectual standard. The former admits relaxed (and therefore possibly rapid) refereeing, probably has a low rejection rate, and is tolerant of speculative papers and write-ups of unfinished work. It makes for lively reading, but a certain amount of garbage gets through. An excellence policy has tight (and therefore sometimes slow) refereeing, has a higher rejection rate, is prepared to send back papers for correction and modification many times if necessary. Such a journal carries an implicit guarantee that papers which appear in it meet fairly high standards by whatever criteria are current in the field.

Most fields have journals of both kinds, and most established journals can be put in one or other category fairly easily. We can all think of examples.

The AIJ seems at present to be neither one nor the other. On the one hand, it does have quite a high rejection rate, publishes many excellent papers and submits many papers to heavy refereeing. On the other hand, many papers of frankly dubious quality have appeared in it. Its standards are erratic.

This is the worst of all worlds. Because of the garbage, the AIJ is not widely perceived as the excellence journal of the AI field: yet a competent author cannot be confident of rapid publication, since his manuscript may land on the desk of one of the fussier members of the editorial board, such as myself (my personal rejection rate is well over 50%).
A clear policy decision needs to be taken and implemented in a publicly visible way. I believe the AIJ should move towards being the excellence journal for the AI field, since we already have an all-comers journal (see the editorial policy statement for "Cognitive Science"), and unrefereed publications in the form of research memoranda already abound. This means a tighter refereeing policy and a higher rejection rate.

I know some members of the editorial board feel that the rejection rate is already too high: and it may seem suicidal to suggest rejecting more papers when we have problems already filling the pages. Nevertheless, I believe this is the only way to ensure the long-term viability of the Journal, lifting it above competition with IJCAI, research memoranda and the newsletters: competition which the Journal can only lose, being inevitably slower than such relatively informal channels. It has to be worth an author's trouble preparing a paper for publication, revising it after refereeing, etc., and only a journal's prestige makes it worth while.

There are other ways than slack refereeing to encourage a good flow of submissions. Some are organisational innovations, some are merely a question of forcefulness and effort. In the former category, I think the idea of a second category of shorter 'technical notes' or 'discussion' papers has much merit. In this way, one can maintain a sort of all-comers journal within the excellence journal, with many of the advantages of the former, but without the danger of polluting the latter, since there is a clear demarcation. Invited review articles, on the model of Berliner's recent survey of chess, are another valuable idea.

In the latter category, I would like to see the use of guest editors for specialist issues, on the model of Sridharan's recent applications issue, encouraged. No doubt many competent people would be enthusiastic to put effort into a limited project, who might be reluctant to take on a long-term commitment. I note that the new proprietors of SIGART seems to be organising an issue on knowledge representation: what went wrong with the AIJ's recent débacle in this same area?

But of course, as Bernard Meltzer makes clear in his recent memorandum, the permanent editorial staff have to generate most of the activity and enthusiasm. The editors also have to set the style of the Journal: it is
their judgement which, above all else, determines its standard. This is a heavy burden, and I think it is probably too great for one person to bear for any great length of time. A better solution might be to have a number of specialist associate editors responsible for various subject areas (such as: vision/natural language/robotics/representation issues/applications/psychological modelling). Each would be responsible for finding referees, soliciting manuscripts, and generally looking after his own area. The general editor's job would be co-ordinating, pestling and generally encouraging this team, overall planning and policy, and looking after all submissions which could not be neatly classified into one of the slots. In this scheme, the influence of the editor would be felt largely through his choice of associate editors.

Such a scheme is surely workable, since many journals work it. I believe it is the best way to maximise the amount of effort and enthusiasm devoted to the furtherance of the journal's interests. There is plenty of enthusiasm and energy in the field; all we really need are ways of channelling more of it into our direction.

Take the problem of getting referees' reports within a reasonable time. I believe that our present system, where the editorial board is (supposed to be) the panel of referees (at least in the majority of cases), actively exacerbates this problem. Surely we should be using the whole world of competent people, to choose referees from? But who in to judge competence? For hardly anyone is intimately acquainted with the entire AI field. But we probably can find people who have such an intimate acquaintance with all the work in a well-defined sub-field, and who could be relied upon to choose competent referees within that area.

This scheme also has several more Machiavellian advantages, which I will not enlarge upon here.

I would be interested in your reactions to this idea. Obviously, it would be impossible to implement it if a majority of the editorial board had strong feelings against it. But if, as I hope, there is a consensus in favour of the idea, then the next Editor-in-Chief should seriously consider setting up some such arrangement.