

The Knowledge Engineering Review

A Publication of
The British Computer Society
Specialist Group on Expert systems

The field of expert systems can now boast that it has scholarly, technical and popular publications to promote its development. Judging from the reception of the first issue of The Knowledge Engineering Review, however, these leave a gap. The Review produced enthusiasm, many new members for the Group and considerable interest from publishers.

This issue has been prepared on the same basis as the first — opportunistically. This time, however, we have been able to include new items prepared specifically for the Review and I anticipate that this will be an increasing pattern for future issues.

Austin Tate's survey of planning and planning techniques is very timely. Planning systems are about to move from the academic laboratory to the software house and his overview of this difficult subject is much needed. Most commercial expert system software is still limited to the kinds of task that the first generation of expert systems could deal with, sometimes called categorisation or "diagnosis" tasks. This must change and planning is among the first capabilities that will be incorporated into the design of the new software.

A paper on human problem solving and expert system design is well overdue. As soon as expert systems became fashionable we began to hear glib phrases about how expert systems "use natural language" and "solve problems the way human experts do". Perhaps the first myth has been laid to rest (well perhaps not) but the second has hardly even been considered. Philip Slatter's comprehensive paper on whether problem solving by expert systems is, or should be, like the problem solving of experts is a valuable source.

Both these papers include extensive bibliographies and guides to the literature.

The Review is also able to republish items which many readers will not have had access to. Thanks to Rick Hayes-Roth for letting us reprint his paper on the state of the art in the United States which originally appeared in Pergamon Infotech's State of the Art Report in Expert Systems published at the end of 1984. Hayes-Roth's observations on the growth of Knowledge Engineering in the United States contains a few surprises, and perhaps some indications of developments elsewhere — though one can see differences between the American and the European pattern. Also reprinted are several book reviews; thanks to Macmillan Publications for their permission.

I would also like to acknowledge the help of Bill Sharpe (Hewlett Packard Research Laboratories) in shaping this issue, and Alex d'Agapeyeff, the Group's Chairman, for his constant moral and financial support in the establishment of the Review. So far the publication has been both informal and infrequent. We shall shortly be finalising plans for a more formal publication and would be pleased to hear from anyone with views on how the Review should appear.

John Fox
Editor, The Knowledge Engineering Review
c/o Imperial Cancer Research Fund
Lincoln's Inn Fields
London WC2A 3PX

Enquiries about membership of the BCS Expert Systems Group should be addressed to:

Maurice Ashill Esq
The Grange Cottage
Off Southborough Road
Surbiton
Surrey KT6 6JN
England