

But though I believe the above in essence to be both valid and sound, there remains a good deal of work to be done in further clarifying PMR and PPR, i.e. (i) and (ii) respectively. Though both seem a canon or presupposition of explanation, there are some contexts and some properties, e.g. shape, where they do not seem appropriate. Or if it be insisted that at some level of explanation they eventually must be invoked, then it seems we may be left with a good many puzzles concerning the nature of "ultimate" reality. Would we, for example, have to admit the necessity of positing, at the lowest level of explanation, some sort of Wittgensteinian simples? There also may be problems of a less esoteric kind. There may be difficulties in supplying all missing premises in the above or in justifying certain steps in modal reasoning. All this, of course, cannot be attempted here. But it is safe to say that whatever difficulties the above presupposes, the notion of picturability *per se* need not be taken as central to Hanson's argument, nor does it render that argument as problematic as Paul supposed. If Hanson is wrong he will be shown wrong by showing the failure (or unclarity) of (i) and (ii), and not by debates concerning what can or cannot be pictured.

REFERENCES

- [1] Hanson, N. R. *Patterns of Discovery*. Cambridge: Cambridge University Press, 1961.
- [2] Hanson, N. R. *The Concept of the Positron*. Cambridge: Cambridge University Press, 1963.
- [3] Newton, I. *Opticks*. (4th ed.) New York: Dover Publications, 1952.
- [4] Paul, A. M. "Hanson on the Unpicturability of Micro-Entities." *British Journal for the Philosophy of Science* 22 (1971): 50-53.

ANNOUNCEMENT

**FOURTH BIENNIAL MEETING OF THE
PHILOSOPHY OF SCIENCE ASSOCIATION**

Time: Weekend of October 25-27, 1974.
 Place: *Center for Continuing Education*, Notre Dame, Indiana.
 Host Institution: University of Notre Dame.

The Philosophy of Science Association will hold its fourth biennial meeting at the *Center for Continuing Education*, Notre Dame, Indiana, October 25-27, 1974. The program will include invited symposia on selected topics as well as sessions devoted to the presentation of submitted papers.

Those wishing to submit papers should send them, together with a one hundred word summary abstract, to the Chairman of the Program Committee, Dr. Alex C. Michalos, Department of Philosophy, University of Guelph, Guelph, Ontario, Canada. Submissions of papers should be made by April 1, 1974. Papers on any subject within philosophy of science are eligible for consideration, and they may be written from any philosophical standpoint. They should be limited to a reading time of about 20 minutes (thirty-five hundred words).