Letters to the Editor

Dear Editor:

In the previous issue's President's Quarterly Message (AI Magazine, Vol. 4, No. 4), John McCarthy quoted part of a net message from Jon Doyle, a faculty member here at CMU, to the effect that the students at CMU are not very interested in fundamental questions, open problems, and basic research. As graduate students in artificial intelligence at CMU, we feel that while the over-all article is clearly directed toward the general case of a real problem, this introduction gives rise to several unwarranted implications, which we would like to counter.

First, it should be noted that Jon Doyle stated that his conclusion was "tentative", whereas John McCarthy refers to it as "definite". In fact, it was a tentative conclusion, based on attendance at and responsiveness to introductory lectures about the various faculty members' interests. This could be an indication of interest, or it could be an indication that applications are easier to appreciate during one's first month in graduate school It should be noted that most of the students here are engaged in what they consider basic research, though probably not pure theory (see below)

Secondly, the tone seems to be one of "you students aren't interested in basic research", rather than that of the title, which is that "basic research isn't emphasized enough". Clearly, basic research needs more deliberate emphasis than applications, in AI as in any science, since the usefulness of applications is always apparent, the relative quantity of basic research is small, and the importance of basic research is always hard to impress on the public. An arriving student's first guess at a research interest is likely to be shaped by the media attention given it, although one expects the actual research topic eventually pursued will be the result of deeper inquiry.

Finally, there is an implication, refuted later in the article, that there are no basic research issues involved in either natural language or expert systems. There are at least three levels of "depth" in research: purely theoretical research, basic research involving a problem domain such as natural language, and "big, build-it-now" application systems. Both types of basic research are less "flashy" than applications, and require more conscious emphasis than applications to receive equal attention.

Sincerely,

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Dear Editor:

As "Artificial Intelligence Prepares for 2000," (Nils J. Nilsson, Winter 1983, p. 7) it may be "asking and answering the most profound scientific questions that people have ever set for themselves," but it is not asking and answering "questions about the nature of those processes that separate us humans from the rest of the universe." Artificial Intelligence [AI] is a Copernican revolution. AI will demonstrate that "intelligence, reason, perception, self-awareness, and language" are not phenomena uniquely centered within human experience, but rather are processes which human experience finds itself revolving around.

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