Editorial

Odds and Beginnings

by Chris Morgan, Editor in Chief

As I sat down to write this month's editorial, I realized I was going to have a hard time sticking to one topic. So much has been going on lately, I thought I'd throw it all into one convenient column. The title "Odds and Beginnings," which I stole from James Thurber, reflects this potpourri.

Artificial Intelligence

I'm particularly pleased that we were able to fit so many interesting articles about artificial intelligence into this month's issue. Many of them were commissioned at last year's AAAI (American Association for Artificial Intelligence) meeting at Stanford. In particular, the articles "Natural Language Processing: The Field in Perspective" (page 304) and "Knowledge-Based Expert Systems Come of Age" (page 238) discuss topics that, in my opinion, have not received the coverage they deserve. A personal computer's ability to understand at least rudimentary English will be important to the future of programming. Similarly, a computer that can give advice and act as an "expert" on a given topic raises some profound and difficult questions. Some of these issues have been dealt with in science fiction, and Donald Byrd explores them in "Science-Fiction's Intelligent Computers" (page 200).

Computer Shows

I've been on the road quite a bit this spring and summer attending computer shows. As always, the West Coast Computer Faire in San Francisco was of great interest. Anyone doubting the vitality of our field need only walk into this show to be struck by the level of enthusiasm. If you want to track the progress of personal computing, go to the West Coast Computer Faire and watch the number of exhibitors expand and the wide-eyed visitors become more wide-eyed each year.

The NCC (National Computer Conference) was held in Chicago this year, and it was easily the most spectacular show yet. (See the two-page photo essay beginning on page 36.) The "star" of the show, attracting a constant enthusiastic crowd, was the Xerox Star terminal, which single-handedly advances the state of the art in terminal design for the office. Many of the system's features recall those of the Smalltalk systems (see last month's BYTE, devoted to the Smalltalk-80 system) I saw at Xerox PARC (the Palo Alto Research Center). The Star system, which will cost $16,595 for the standard unit, treats all documents, files, etc as concrete "objects" that can be manipulated by the user. Its software structure resembles a nest of boxes, each box containing more and more complex information about the workings of the system. Users need penetrate only to the box they require to do a particular job, thus avoiding information overload.

Clever user-interfacing devices abound on the Xerox Star, including a "mouse," a mechanical box with wheels that can be rolled around on the desktop to position the cursor on the screen. I could go on at length about the features of the machine, but I must move on. An excellent treatment of the Star can be found in the April 27, 1981, issue of the Seybold Report, a twice-monthly report that consistently offers the field's best coverage of word processing, computerized typesetting, and office automation. The report costs