Correspondence

Music Composition

To the Editor:

I am a composer attempting to assemble a small computer music system for my private studio. Hardware will consist mainly of the Apple IIe and a Serge or Synton modular analog synthesizer. The microcomputer will serve, not for direct digital synthesis, but as a control machine and vehicle for algorithmic composition.

As to a programming language of choice for computer music the consensus of advice received seems to be: use LISP for a large system, FORTH for a small one. Reading therefore much about FORTH, I am continually struck by the impression that much of what excites rhapsodizing about this language could probably be accomplished even more powerfully, elegantly and compactly in APL. Yet in the context of computer-controlled sound synthesis or algorithmic composition APL is hardly ever mentioned!

Why is this? I can imagine only a few serious reasons: (1) that APL is somehow intrinsically unsuited to controlling synthesizers; (2) that a prerequisite to using APL adroitly is more mathematical sophistication than most composers dream of; (3) that the array (in APL), as the only data structure, is somehow more limiting than the list (in LISP); (4) that the extraordinary versatility and combinability of primitives in APL cannot compensate for its non-extensibility.

In any case, would you please enlighten me?

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APL on the IBM PC

To the Editor:

IBM's APL for the PC requires one to have the Color Monitor and the corresponding Color Monitor Adapter Card. Even if one has these, the definition and clarity leave something to be desired; the monochrome monitor is much to be preferred for programming, and is a lot easier on the eyes, especially over an extended period. A company called Computronix International has now made it possible to use the Monochrome Monitor for APL, while sacrificing none of the keyboard characters for text or BASIC. Operation is automatic; the APL characters appear when using in APL mode, and the others when not. All that is required is to replace the character generator ROM chip on the Monochrome Monitor board with one supplied by Computronix (1638 Fairgreen Drive, Fullerton, CA 92633; phone (714) 773-1879). The cost is $39.95 plus postage, and tax where applicable. It took me only a few minutes to install the new character generator following the instructions. For APL, it is definitely far superior to the Color Monitor even if you have one.

John Collins
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"Careers in Computing" A call for comments

To the Editor:

This note is being sent SIG officers and to SIG members via the Newsletters, as a follow-up to the launch meeting of the "Careers in Computing" project chaired by ACM Vice-President JAN Lee at ACM'84. JAN also spoke about the project at the luncheon for SIG chars and it was discussed by the SIGBOARD. I was asked to collect comments from the SIGs to be incorporated in a plan of campaign on December 1 that will pool feedback from all the areas of ACM which are involved.

The project will provide information about "careers in computing" to young people of high school age and to other people who interact with the school population. The information will include advice on: curricular material for high school computer courses, other aspects of high school preparation for college computer work (which may be learning to read and write English rather than esoteric programming languages), subject specialities that can be combined with computing (because computing affects so may activities, the primary need may be answers to questions of the form "How could I use computing in a career in ..."), prospects for people lacking particular skills (e.g. math) to work with computers, the selection of colleges which combine computing with other specific subjects, and so forth.

A career in computing is not construed as a career as a computer scientist or programmer or systems analyst. Several discussants felt that the spirit of the project is closer to "computers in your career" ("you" being the student). It will give a lot of attention to educational paths that let students take a minor or selected courses in computing while majoring in other subjects at college. The project seeks material to help students make realistic career choices - it does not want artificial glamorizations to recruit more students into computer science.

Views are sought from the SIGs on the following matters. What should high school students be taught and told that can make them aware of careers that use computing with which SIG members are familiar? What should be done to help students prepare for these careers? For which kinds of groups and individuals should material be developed? Schools, youth clubs, computer clubs, civic organizations, schools of education, boards of education, legislative committees, departments of education labor at the state and federal levels, teachers unions, private and public foundations, other professional associations; teachers, school administrators, high school counselors and college recruiters are possibilities. Are there more? Where should activity be focused?

What kinds of materials should be developed? What special skills and volunteer efforts can SIGs provide, such as graphics and electronic publishing? Should special activities such as scholarship funds be developed? The delivery mechanism will include new lectureship activities promulgated by chapters. What roles should national and local SIGs play?

The comments in this note are starters. The more ideas that respondents give the merrier. Several people who discussed the project in San Francisco stressed the need to combat some quite widespread misconceptions about computing, and to emphasize the volatility of the field, the necessity to learn how to learn, the danger of premature specialization trapping young people in areas that are "hot" today but potentially dead by the time they reach the job market.

The post office still delivers letters to me at 17 Lovers Lane, Princeton, NJ 08540, sooner or later. I trust that resolving mutually hostile electronic mail protocols will not still be a potential career in computing by the time my children have all graduated.

Thanks.

Michael P. Barnett
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U.S.A.

Organizations

CBS Sparks New-England Group-- From Glass Box to Crystal Ball

Arthur Anger

The New-England APL Users' Group got off to a good start with a first meeting on 29 November 1984. Meeting in Cambridge, Massachusetts at the M.I.T. Faculty-Club Penthouse, it began with a cocktail hour--an opportunity to register, to engage in congenial conversation, and to browse through SIGAPL and other publications. The main attraction for the evening was Vice-President Richard Silverman of the Columbia Broadcasting System who outlined the extensive use of APL within the Survey and Elections Unit of CBS.

Beginning with occasional use of outside vendors for special statistical applications, the Statistical Unit later acquired substantial in-house facilities and took over a number of data-processing functions from other departments because of their skill in solving problems when using APL. One of their major activities is to prepare the CBS and New York Times survey, a continuing telephone survey of the nation's attitudes on many issues.

Their programs help them to select respondents with an appropriate diversity of background, to record responses, to schedule follow-up calls, and (of course) to summarize and analyze results. A more widely visible activity is their support for convention and election news reporting, particularly in predicting outcomes. In a large database in New York City they store pre-election data on demographic and political trends and candidates' and delegates' backgrounds. They bring to each convention a support van with several microcomputers containing extracts from the central database, to which they are frequently linked during the convention for updating in each direction. Their data-query programs can summarize how many delegates may be of a particular opinion or background which is relevant to a developing issue, and can even list delegates who may have the most to say about it if interviewed. Query replies can be displayed for the reporters on a micro's display screen at the news desk, or (particularly for vote tallies) may be superimposed on the video broadcast by a specially equipped micro in the van.

The New-England Group has also scheduled a second meeting, on 28 January, to hear Kenneth Iverson discuss the use of APL in teaching Applied Mathematics, and a third, on 4 March, for a presentation on threaded workspaces in the APL Machine now being produced by Analogic.

With an initial attendance of nearly 60--from a seven-state region--and regrets from others, they appear to have a substantial audience to draw upon. A few have volunteered to assist the organizing committee in its tasks, the chief of which is to find a variety of interesting activities which will draw enough participants to make a formal organization feasible. For further information, contact:

New-England APL Users' Group
P.O. Box 1691
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USA 02238

Telephone: (617)491-1833

Recent news from Toronto Special Interest Group

We hear that the Toronto Area Special Interest Group is active again this year, with meetings being held regularly at the Ontario Institute for Studies in Education, OISE, 252 Bloor Street West, in room 214. They start at 6:00 pm, and always finish by 8:30 pm. The attendance usually runs to about 50 people, except for the Computer Show which drew over 200 eager viewers. Recent and upcoming events include:

Date	Details
84 09 20	APL and UNIX: Adrian Browne and Spectrix
84 10 17	Annual Computer Show: STSC, Analogic, WatCOM
84 11 06	Business Graphics: Keysoft, Life Ins, Bank of Montreal
85 01 28	APL2: Dr. James Brown
85 02 25	Birds of a Feather: APL VM, APL/TSO, Generalised/Nested Arrays
85 03 25	Managing an APL Shop
85 04 29	Annual Meeting, Q'Nial
85 05 27	Local Area Networks (LAN)