



UO Professor, Computers Make Beautiful Music Together

"When I discovered computers, I realized life is very short."

The words are composer Paul Lansky's, but they are often borrowed by UO Music Professor Gary Karpinski because they echo his sentiments exactly. Karpinski is the founder and director of the School of Music's Lab for Technology in Music Instruction, and he can barely keep up with all the ideas for music-related computer applications that pop into his head.

Musicians and computers may seem like strange bedfellows, but take Karpinski's enthusiastic tour of his department's computer facilities and any doubts about the marriage between art and technology are soon dispelled. Karpinski himself had no notion that he would one day become so involved with computers. A musician since early childhood, the Philadelphia-born professor followed a traditional musical route, first attending the Peabody Conservatory in Baltimore, then studying music and music theory at Philadelphia's Temple University and finishing with a Ph.D. in music theory from City University of New York.

In 1983, while still a Ph.D. candidate, he was invited to

serve as director of the Lab for Computer-Assisted Instruction at Brooklyn College, and it was there that he became excited by the pedagogic potential of computers. Laboring on a Commodore hooked up to an old black and white TV monitor, Karpinski wrote all the software for the Brooklyn lab. He was hooked. From that time forward, Karpinski was an avid explorer of a new frontier: the application of computers to teaching and composing music.

Although his enthusiasm for electronic potential is boundless, Karpinski stresses that human instruction can never be replaced by computers. "Computers assist in instruction," he says, "they can't do the whole job."

The music instruction lab Karpinski currently manages exemplifies the value of computers as teaching tools. The lab is divided into two sections: a faculty workstation and a student facility. The faculty workstation features a Macintosh IIcx with Radius two-page display, a Kawai keyboard, and a LaserWriter printer. Using the *Finale* program with this equipment, teachers can easily design instructional handouts simply by playing the keyboard—*Finale* instantly translates the sound into musical notation. Or, using the MacRecorder digitizer, they can analyze timbre, translating sound into visible waves.

The student section of the lab is stocked with three Mac

Pluses, each with a Kawai synthesizer and Music Instrument Digital Interface (MIDI), as well as four Apple II computers with Casio keyboards. These "warhorses," as Karpinski calls them, are the basic tools that help students hone their aural skills—their ability to listen to music and analyze and write down precisely what they hear.

Because the ability to listen intelligently affects every area of a student's musical performance, Karpinski continually looks for ways to improve aural skills. He has developed a diagnostic procedure to identify what he terms "the four phases

of music perception"—hearing, memory, understanding and notation. Once a problem with any one of these phases is identified, specific computer drills can be recommended that significantly improve performance.

Karpinski looks forward to the day when computers can serve as sophisticated pitch-tracking devices, capable of analyzing a musical passage and testing a student's recognition of rhythms and pitches. He is also enthusiastic about the possibility of developing computers that can recognize, and react to, students' sung

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Trial Program Gives UO Departments Hands-On Preview of Mac Quadra 700s

UO departments that are seriously considering Apple product purchases stand to benefit from the company's new Quadra 700 Trial Program, currently being offered through the Computing Center's Microcomputer Purchase Plan.

Through September 25, individual departments will be able to try out and evaluate a new Macintosh Quadra 700 system at no charge for 60-90 days. At the end of this period, they may either purchase the system at a special discount, or return it. The Quadra 700 systems will be eligible for a full 12-month warranty.

The trial program system includes

- a Macintosh Quadra 700 (4 mbyte RAM, 80 mbyte hard drive)
- the choice of an AppleColor 13" RGB or Macintosh 16" Color Monitor
- the choice of a Standard or Extended keyboard

Representatives of interested departments may call Kathy Heerema at ext. 6-1717 for further details and an application for participation in this program.

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responses. Rudimentary prototypes of such devices exist, but as yet their capabilities are very limited.

Another fond hope for the future, closer to realization, is a revolution in methods of teaching music history. Consulting online texts, the student of the future will not only be able to read about famous composers, but also *hear* musical examples as they read—pausing to select other portions of a cited composition, or listening to the entire piece, as desired.

To further these ends, Karpinski is currently applying for a grant to support computer development for the core curriculum, including music theory, aural and keyboard skills, and music history. He is in frequent contact with colleagues in the

Association of Technology in Music Instruction, a national think tank which circulates ideas for computer use in the music field. The organization, which recently nominated Karpinski for president, has a core group of enthusiasts with computer programming skills who keep in touch via e-mail between annual meetings, trading information and innovation.

All this does not begin to touch on the dramatic role computers can play in music composition—Mac-based synthesizers capable of both creating and recording sound, controlling timbre, instantly playing back compositions in CD-quality full orchestral color... But that is another story. As Karpinski has already noted, life is short.



D on't Forward Mail to Yourself!

For some unknown reason, a small group of campus e-mail users have been forwarding e-mail from their VAX accounts to their own Internet addresses. For example: at some point user JDOE issued a SET FORWARD command while running the VAX MAIL utility, giving her/his own Internet address as the forwarding location, i.e.,

```
MAIL>set forward in%"jdoe@oregon.uoregon.edu"
```

Whatever their reason for doing this, people are not achieving a happy result. Forwarded mail loops for awhile, then eventually lands in a hold queue to be sorted out by Computing Center staff. If you are forwarding mail to your own Internet address, please issue another SET FORWARD command the next time you run MAIL, providing a new forwarding address, or issue a SET NOFORWARD command to cancel forwarding, i.e.,

```
MAIL> set noforward
```

WHAT'S NEW ??

PC Users— New Network Software Arrives

Network Services recently enhanced the selection of public-domain software available to networked PC users, adding new packages and updating others. Two new programs, PC Gopher and Trumpet, and new versions of NCSA Telnet and NETX.COM, are now available for copying from the PC Public Domain library.

PC Gopher - Like other versions of this distributed information delivery system, PC Gopher (v. 1.02) provides networked PC users with a wide selection of information from local and international databases. Such services as the UO's Whois database and Campus-Wide Information System, local and national weather reports, and other services at remote sites throughout the world are now at your fingertips.

Trumpet - Trumpet (v. 1.04b) is a new program for reading USEnet news on a networked PC.

NCSA Telnet - The new version of Telnet (v. 2.3.05) eliminates many of the bugs in earlier versions and adds Finger and Whois to its FTP and Telnet services. For example, you can locate information on a campus personality by typing

```
C:\> whois -h whois name
```

identifying the person by their last name.

NETX.COM - The new version of the Novell shell, NETX.COM (v. 3.26), replaces all previous NET2, NET3, NET4, NET5, and NETX files, and is required to run NetWare with Windows 3.1.

To copy any of this software from the PC Public Domain library, log in on the NetWare file server ZEUS by typing

```
C:\>f:login zeus/pd
```

Select the menu item "Copy Communications Software" and copy the items you desire.

WHAT'S NEW ??

BCS Software Update

The Computing Center recently received the latest update to the Boston Computer Society's CD-ROM disk of public domain and shareware software. Version 9 includes updates to popular software, as well as new System 7-compatible applications and popular extras like TrueType fonts.

If your Macintosh has access to UOnet, you may obtain BCS software from the AppleShare CC Public Domain file server. Otherwise, call 346-4412 to set up an appointment to copy the software on a Microcomputer Support Center workstation in Room 202A.

Eudora's Ph Feature Enhanced

Mac users who make use of Eudora's Ph (phone) command to locate information about people on campus will find some improvements in how they specify names and how Eudora displays information. When identifying the person, spaces can now be used between parts of a name instead of periods, e.g.,

Alice Hanson *instead of* Alice.Hanson

If you are not certain of the spelling of a name, you may use either the "wildcard" character * to replace an unknown letter, or provide a choice of letters in brackets, e.g.,

Alice Hans*n *or* Alice Hans[oe]n

In either case, Eudora looks for a match based on the name you enter and the choices you give it.

You may also restrict a name search by including a department, title, or address with your name specification, e.g.,

Hans[oe]n department=computing

In this example, Eudora would respond with the names of everyone in University Computing named Hanson or Hansen.

The information Eudora displays is now arranged in a more readable format. Soon, Eudora's Ph command will provide data on UO students as well as faculty and staff.

New SYSTAT Write-up Aids VAX, DOS Statisticians

New help is available for users of the VAX/VMS version of SYSTAT, the general-purpose statistics program. The Documents Room (205) now has copies of a newly-released, informative write-up titled "SYSTAT Statistics Package."

The new write-up, written by a member of the Center's VAX Consulting staff, includes numerous examples of specific procedures. DOS SYSTAT users may also find this document useful, as the VMS version of SYSTAT is virtually identical to DOS Version 5. □

VMS 5.5 Upgrade Offers Batch, BACKUP Enhancements

The recent VAXcluster upgrade to VMS 5.5 introduced a few notable enhancements for batch jobs, as well as some useful new BACKUP utility documentation.

Batch features include

- a /NOTE qualifier for the SUBMIT command that can be used to annotate the flag page of a printed job log file
- the ability to use the SET PREFIX command to time-stamp lines of output in a job log file

For more details on these new features, type

```
$ help submit/note or
```

```
$ help set prefix
```

from VMS.

New documentation distributed with Version 5.5 includes *Using VMS BACKUP*, a helpful introduction to the BACKUP utility. The manual is available in the Computing Center Documents Room (205) and online, in both ASCII and PostScript form. To display the ASCII version, type

```
$ type sys$examples:using_backup.txt
```

at the VMS prompt. You may also print out your own copy by using the PRINT command instead of TYPE.

To print a copy of the PostScript version, use the PSPRINT command:

```
$ psprint sys$examples:using_backup.ps
```

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New Student Editions of Minitab Include DOS, Macintosh

Addison-Wesley has released a new version of the Student Edition of Minitab, based on Minitab Release 8 for DOS. The new release offers many changes—larger worksheet limits, improved importing/exporting facilities, enhanced statistical procedures—but the big news is that it is now available for Macs as well as DOS PCs.

The Mac version runs on all Mac models except 128K, 512K, and 512e, provided the machine has at least 2.5 megabytes of free disk space and runs System 6.02 or later.

Those who use a microcomputer version of Minitab as a teaching tool may want to request

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more information about this new release from Addison-Wesley's Educational Software Division (1-800-527-5210).

Note that individual users need to request that the software be ordered for them by a bookstore; Addison-Wesley does not sell directly to individuals.

DARKWING to Offer Full SAS Portfolio

This summer the Computing Center will be installing the full portfolio of SAS software products on DARKWING, the new academic UNIX system. Products included in the SAS bundle include Base SAS, SAS/Stat, SAS/Insight, SAS/Assist, SAS/ETS, SAS/FSP, SAS/IML, SAS/QC, SAS/OR, and more. Stay tuned for further details about this software as the installations proceed and DARKWING access expands later this summer.

HLM Installed on OREGON

The College of Business has obtained a copy of HLM, a hierarchical linear models package developed by Scientific Software, for use on VAX/VMS systems. To learn more about accessing this package, call Joe St Sauver at 346-1720.

Say Goodbye to SCA

Prohibitive personnel and licensing costs and limited usage will soon kill SCA, the multivariate time series statistical package. Unless funding increases, SCA will be removed from OREGON when its current license period expires later this year. If you require continued access to SCA and can identify funds to help pay for its license expense, contact Joe St Sauver at 346-1720.

SAS Conference Convenes in Portland

The Airport Holiday Inn in Portland will host the 1992 Pacific Northwest SAS Users Group Conference this summer. The conference is scheduled for June 25th, from 8 am to 5 pm. For more information, contact Michael Mitchell at Kaiser Permanente, 503-721-6479.

-joe st sauver

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