

TECHNICAL UPDATE

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Welcome to the second Tech Update column! In this installment we'll be exposing you to a number of announcements made since the last column went to press. While the last edition focused almost exclusively on the Kodak PhotoCD technology, in this edition we'll take a look at several technologies from recordable compact discs to multi-script word processing.

Before we turn to the "news" however, I want to once again make an appeal to readers. My own area of expertise is not so broad as to cover all aspects of language and technology—my focus is firmly rooted in computing—and thus I will rely heavily upon your contributions. If you read about an interesting technology relevant to language instruction, or see a presentation of a new technology that you think might be interesting to our readers, *please* forward that information to me (see my Internet address at the end of the column).

If you will allow me to stretch the definition of "focus," I would like to focus on four different areas of language and technology in a single column. Recent developments and announcements I feel worthy of mention can be roughly divided into the areas of:

- Foreign Character Sets & Word Processing,
- Courseware Development

- Desktop Video & Graphics,
- Lab Management, and...

OK, so there will be a Miscellaneous as well. Forgive me.

FOREIGN CHARACTER SETS AND WORD PROCESSING

WorldScript

Many of you will have heard rumors, at least, of a new feature of Apple Computer's System 7.1 operating system for Macintosh computers called "WorldScript." At the time of this writing, WorldScript is not a commercially available extension to the Macintosh operating system so any comments here should be considered preliminary.

Word processing in non-Roman character sets such as Japanese, Arabic, or Chinese requires special consideration. For some time, the mixing of such character sets in the same document with English or other Roman-based scripts has been problematic, often requiring that the computer be run under the Macintosh operating system of

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the target language (e.g. Arabic or Chinese). This is clearly undesirable for introductory or intermediate level students struggling with the language, forcing them, as it does, to master a highly technical vocabulary of computer terms in the target language just to write their single paragraph writing assignment. WorldScript will allow the user to run the computer under the English operating system, yet still produce documents using mixed scripts and thus allowing the student to focus on *his/her* use of the language and *not* the software author's technobabble.

The way WorldScript will likely work is this: once the extensions are installed along with the appropriate language module, a new menu will appear to the right end of the menubar. Often the menu will take the form of the flag of the country most closely associated with the language, such that the U. S. English module uses the U.S. flag. Since the standard keyboard map varies from country to country, selecting a different module from the flag menu will change the keyboard map to that of the target language. Multiple typefaces will still be available in any of the various languages, and WorldScript will allow a particular typeface or font to be associated with each language as a default.

Apple released the Japanese module in the U.S. in April of 1993, though software developers already have the extensions and language modules for Cyrillic (I wonder which flag they'll use?), Arabic, Hebrew, Thai, Traditional Chinese, simplified Chinese, Japanese, Korean, Polish, Hungarian and Czech. Contact your Apple representative for a list of dealers.

Nisus Support for WorldScript

Developers of the Nisus and WordPerfect word processing applications have announced their support for WorldScript.

Nisus has supported a limited version of WorldScript for some time now and the Arabic School here at Middlebury has selected it as their standard. To change from English to Arabic (and thus from left-to-right to right-to-left word processing), one merely selects an Arabic or English font from the font menu. Nisus handles changing the keyboard map and the flag menu. I haven't yet seen the version 3.4 just released by Nisus Software, but I can only assume that the functionality remains this simple. Nisus can be configured such that menus, dictionaries and tools will appear in the selected language, or remain in a single language.

The Limited Flag Edition of Nisus, which retails for \$395 per copy (academic 10 packs are available at significant discounts), uses any Roman based scripts (including Finnish) or Japanese under KanjiTalk. The Complete Flag Edition, which retails for \$495, works in all Roman-based scripts plus Arabic, Chinese, Czech, Farsi, Hebrew, Hungarian, Korean, Polish, Cyrillic, Japanese and Thai. This edition will ship to work in any Roman script plus *one* non-Roman language. Additional non-Roman scripts will be available for \$45 per script. One free foreign language dictionary is also part of the basic package.

Nisus runs *only* on the Macintosh and requires System 6.07 or later. Some features of Nisus are only available under System 7.1 using WorldScript (my best information says that to mix more than one non-Roman script in a single document will require the latter).

Nisus Software
107 S. Cedros Ave.
Solana Beach, CA 92075
(800) 922-2993

Japanese/English Translation Software

In another word processing related announcement, the Language Engineering Corporation has announced a new product for the Macintosh called Ambassador. Ambassador is a special focus word processor designed for producing form letters in English or Japanese. Letters written using standard phrases or words in English can be easily translated to Japanese or the reverse using simple menu selections. Ambassador, which is dictionary based, comes with 200 standard letters and 450 templates, and retails for \$295. Speakers of Japanese or English can add new Japanese or English phrases to the dictionary and to their documents if they are proficient in the target language. Ambassador ships with English and Japanese manuals and the company claims to be working on French and Spanish versions as well.

Language Engineering Corporation
385 Concord Ave.
Belmont, MA 02178
(617) 489-4000

COURSEWARE DEVELOPMENT

Recordable CD-ROM Drive

The most interesting development in the Courseware arena returns us to a discussion of things CD. Pinnacle Micro has released a new *recordable* CD-ROM drive, model RCD-202. The device will retail for \$3,995 (just a few years ago such a device would have been \$40,000!). This device is the size of standard external half height hard drive. The drive can be connected to either a Macintosh or a PC using the SCSI port.

It will take just one hour to record 580 megabytes of data in either the ISO 9660 (a common IBM compatible format), Apple's HFS (the standard format for all Macintosh

disks), AIFF (Audio Interchange File Format), or Digidesign Sound Designer II formats. Both audio formats are compatible with consumer audio CD equipment. (Amateur musicians will go wild over this, but just imagine the possibilities for language teaching.) Pinnacle claims the discs produced can be played on any standard CD-ROM drive as well. Discs are multisession so one can *add* data at a later date to one of the discs.

The RCD-202 drive can be used for reading commercial CD-ROM discs and thus doubles as a normal CD-ROM drive. Blank discs will be \$39. Discs produced using the RCD-202 can be sent to commercial publishing houses for duplication. Pinnacle will provide software for either the Macintosh or PC to do the recording.

Pinnacle Micro
19 Technology
Irvine, CA 92718
(800) 553-7070

Supercard to Hypercard Converter

Heizer Software has announced a \$200 software product to translate Aldus' SuperCard projects *back* into HyperCard stacks. SuperCard is a HyperCard work-alike that adds several features and has been quite popular with courseware developers. Unfortunately, the Aldus Corporation has announced that they intend to sell off SuperCard and thus faculty developers may be left with no support. The application, Homeward, can't fully translate all SuperCard features but it will produce a list of those features it was unable to translate.

Heizer Software
1941 Oak Park Blvd., #30
PO Box 232019
Pleasant Hill, CA 94523
(800)888-7667

HyperCard goes Home to Apple

HyperCard was originally an Apple Computer software product released in August of 1987 that shipped with every Macintosh computer. However, in September of 1990, Apple announced that it would sell HyperCard to Claris, its wholly owned software subsidiary. Many users found that Claris' support of HyperCard was lacking and that continued development languished. As Apple began development of AppleScript, a scripting system which, once released, will allow users to control applications and the operating system by writing scripts (similar to "macros" but *much* more powerful), questions arose concerning the role which HyperCard would play. In January of 1993, Apple announced that they have re-acquired HyperCard from Claris and will roll development of AppleScript in with a future version of HyperCard, using HyperCard as the front end for AppleScripts capable of controlling nearly all aspects and functions of the Macintosh. The new AppleScript version of HyperCard is expected to be released late summer or early fall of 1993.

In related news, Apple will soon be releasing the beta version of AppleScript to developers. For our purposes the interesting item here is that users will be able to write scripts in their native language and grammar—these scripts will be stored in a compiled, coded format so that a user whose native tongue is different from that of the original author can open and edit the script in any language supported.

DESKTOP VIDEO & GRAPHICS

Inexpensive 35mm Color Slide Scanner ("Coolscan")

Nikon has announced an inexpensive 35mm color slide scanner about the size of an external floppy drive for \$2,415.00. Many such devices cost upwards of \$6,000. The device requires a SCSI interface (a very common method of connecting hard drives to a computer and supported by all Macintosh and many PC computers). The device will scan 35mm color slides or negatives at 2700 dots per inch, thus allowing one to import color images into curricular materials. Nikon is gambling that not only service bureaus need to import color images, but that the less frequent users don't need the speed normally associated with the more expensive devices and they were thus able to reduce costs by sacrificing speed.

Nikon Inc.
1300 Walt Whitman Road
Melville, NY 11747-3064
(800)526-4566

Full Motion Desktop Video for the Macintosh

SuperMac Technologies has shipped a combination hardware and software package called DigitalFilm for \$5,999.00. The Nubus card supports full screen, full motion capture of video as well as playback, though playback requires that the card be installed in any computer upon which one intends to display full motion. The card supports PAL and NTSC video inputs. Some of SuperMac's advertisements made claims which might lead one to expect the same kind of performance from DigitalFilm that one might expect of professional video editing equipment; however, performance is not broadcast quality, and SuperMac has changed some of their advertising.

SuperMac Technology
485 Potrero Ave.
Sunnyvale, CA 94086
(408) 245-2202

Farallon Computing
2000 Powell St., Suite 600
Emeryville, CA 94608
(510)596-9000

LAB MANAGEMENT

Remote Control of Mac or PC Computers from either Platform

Farallon Computing has released Timbuktu for Windows. The \$199 package includes the Phonenet PC software as well as the Timbuktu for Windows software. Timbuktu is a remote control software package that allows the user of one computer to "take control" of other machines which reside on the network (appropriate and varying levels of password protection are a feature of course). Here at Middlebury, all of our public machines and most faculty and staff machines have been installed with the package so that we in Academic Computing can provide "on-site" technical support without ever leaving our offices! How many times have you tried to describe what a user should be seeing, or been given a very poor description of what the user is seeing? Timbuktu brings your support staff and the user together. Further, Timbuktu has proven to be invaluable in our computer classrooms. Our instructors no longer have to run around the laboratory whenever a student needs assistance. Rather, the student's screen can be projected from the instructor's presentation workstation, and a "problem" can be converted to a learning experience for the class as a whole.

The Windows version of Timbuktu requires Window 3.0a or later, though 3.1 is recommended. The Phonenet PC software gives Windows users access to Macintosh-based file servers and to Appletalk printers as well through a very easy to use "Chooser work-alike."

MISCELLANEOUS

Hearing Impaired Customer Assistance

Apple Computer has installed TDD software for the hearing impaired at its Customer Assistance Center. That new number is (800) 833-6223.

NeXT Computer Closes Down Hardware Operations

NeXT computer has exited the hardware market. All hardware operations have been transferred to Canon, Inc. NeXT will concentrate on selling its operating system, NeXTstep, for 486 based workstations.

New LCD Panel for Video and Computer Projection

In Focus Systems has released a new LCD panel (Panel Book 550) that is smaller and lighter, yet it projects the same image as older, larger active-matrix displays. Such LCD displays are commonly used to display a computer screen using a standard overhead projector. Active-matrix displays are fast enough to display full motion video without the "ghosting" effect common among passive matrix designs. The new panel projects an image of 640x480 pixels (standard Macintosh or VGA resolution) using 1.4 million colors simultaneously. The panel supports Macintosh, VGA, NTSC, PAL & SECAM signals and comes with a remote control and universal power adapter. The panel lists at \$5,995.

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Tualatin, OR 97062
(503)692-4968

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