Plus nous aurons de choses à dire, plus nous les dirons simplement.

Toujours plus facile, toujours plus utile. Le regard de l'homme est tourné vers le bien-être. Et c'est pour cela qu'il a imaginé l'informatique. Avec l'informatique, il est doté d'un outil incomparable: un outil intelligent. Un outil qui simplifie la vie. Mais pour être simple, il faut être sophistiqué. Il faut une technologie à la fois performante et fiable.

Comme les puces de mémoire de 1 mégabit qu'IBM, la première, incorpore à ses ordinateurs (1 mégabit, c'est l'équivalent de 100 pages sur l'angle du petit doigt). Comme ses réseaux qui relient les matériaux les plus divers et sont capables de gérer des informations disséminées géographiquement. Plus de mémoire, plus de puissance, une connectivité étendue, c'est la possibilité de programmes plus complexes, plus évolués, pour faciliter le travail de l'utilisateur. Lui offrir, par exemple, les mêmes fonctions bureautiques dans une gamme de produits qui va de l'ordinateur personnel IBM aux grands systèmes, en passant par l'ordinateur départemental IBM 360 ou 9370. Alors qu'il y a quelques années, il fallait beaucoup de patience pour entrer en contact avec un ordinateur, aujourd'hui les enfants pianotent sur les claviers des IBM PC. Demain, l'intelligence artificielle facilitera encore plus votre dialogue avec l'informatique. En France comme aux États-Unis, IBM expérimente la reconnaissance de la parole qui supprimera tout intermédiaire entre vous et l'ordinateur. C'est ainsi que l'extrême complexité technologique simplifiera la vie.

Brochure «L'innovation technologique» disponible sur demande. IBM France, service 2007, Tour Générale, La Défense 9, 5 Place de la Pyramide, 92800 Puteaux.
Instead of an Editorial: Changes

The takeover happened literally on the day we went to press, so sorry for the jolt, but this is the first chance we’ve had to welcome our new Language Monthly readers. We are very happy that you are with us, and we hope to live up to the trust Geoffrey Kingsport placed in us when he decided to find a new home for his editorial efforts. Geoff’s influence on Contributing Eds is already clear in some of the sections of the magazine, especially in the new Language France section on multilingual webworking, the review section, and the calendar. In addition, he will be advising us editorially on features and contributing to the product news sections.

Our absorption of Language Monthly is the first of two major changes that occurred at LT this summer. The other was that Language Technology became an independent publication. For 13 months, it had been published by INK International, Europe’s largest translation company for high tech industries. INK invested LT because it rightly saw that no public reaction was covering the technological revolution occurring in the language industries in which it was deeply involved. But from the outset, both INK and LT recognized that INK’s main business was translation and linguistic software, not publishing, and that someday LT would have to become an independent company. That day was 1 September. LT is now on its own. We thank INK for our initial launch, and its unstinting support during our growth and evolution, and wish it well in its future endeavors.

Both events suggest that this might be a propitious moment to re-state what LT is all about. LT’s mission is to inform professionals working with natural language about the rapid and profound changes occurring in their industries. Natural language is the raw material of human communication. The professionals are communicators—writers—and include everybody from writers, editors and translators, to document managers, MIS directors, and software and hardware developers making products for them. We want to be of service—to report on and review the new tools as they appear, and perhaps help the companies making the changes, and spotlight people doing important work. And have a bit of fun while we’re at it because life is grim enough already, and as a great philosopher once put it, a special talent for helping the medicine go down...

A few words on the continuing changes occurring within the pages of LT. First, we’ve regretfully discontinued the Technoscript section, which covered other technological innovations. As much fun as it was to put together, it wasn’t possible to continue it. We have decided to devote the space and editorial resources to issues of direct concern to readers. As noted above, we have added a new news section called Linguoplace to focus on multilingual issues. In addition, we have increased the size and scope of our own and look forward to future sections. And, of course, we have a vastly expanded classified section.

We have also re-thought pricing. Until now, LT has been primarily distributed by subscription (we are on newsstands only in the Netherlands, and then only on a few). So the cover price was set to include an average mailing cost for delivering LT to a subscriber. We now intend to start placing LT on newsstands, so we decided to adjust our prices to reflect the actual costs involved in producing LT and distributing it. As yet, we see, the cover price has been dropped. But we have now made explicit in the subscription price the cost of mailing. New subscribers will have the option of selecting whether they want faster or slower delivery, and pay the price or save the shipping costs.

Coming up next month: a look behind the doors of IBM’s Watson Research Labs at Big Blue’s natural language research program. Stay tuned. The fun has just begun.

—Louis Brotha
Computerized proofreading is lacking increasingly like reality in competition in the gravemarker checker field today.

U.S. publisher Robert Millin just announced DBC's adoptions, the first VAX minicomputer range of a checker based on the publisher's Comeback product. And other how could bring game machine to flying seat and fast—

with product announcements from Smith & Harmon, Reference Software, Sensible Software, and Proximity Technology, Mercier IBM—its Binary Majesty—serves the battle below in the unprofitable knowledge that is a critic's grammar checker has nothing to prove.

"A.D.P., VAX Grammar Checker's paper enables it to go far beyond the capabilities ever previously—and spelling and style checker," says T. Howard Ellinger, head of Thought Millin's Business Software Division. "It analyzes sentences and detect common errors in syntax, selection, punctuation, capitalization, hyphenation, and spelling—and goes on to suggest corrections.

Is a user aware that "the dog is sniffing" for example, the software identifies the present-subject verb agreement and suggest "the dog is sniffing" as just as good at spotting mistakes with irregular verb forms, pronoun case, contractions, and plural and possessive noun forms. Similarly, it will flag such breaches of stylistic/etiquette as past infinitives, weak prepositional phrases, and long two-phrase.

Computerized proofreading rival Smart Communications, New York—whose custom-tailored solution Max Expert Editor has been used in the narrative editing of documents on large computer systems since the mid-70s—"accepts" DBC's product. Noting that Max is also available for a large range of terminals, joins the Mac II and IBM 3922, president John Martin points out: "DBC's entry into grammar checking marks a clear market. They do the missionary work, the advertising, and the customer education. We ride along. DBC are the only good." Smart praises his company to a barrier. Though his custom-tailored solution may initially seem much more expensive than off-the-shelf programs such as DBC's, Smart points out: "we offer the human touch. We come in and tell the customer how to use it.

In the more popular protocol of the PC, the system provided a great deal of grammar-checking until its loss was San Francisco–based Reference Software, which recently released (continued on next page)
DON'T TOUCH ME THERE

Vermont-based Contax Technologies Corp. is pleased to launch its new touch-sensitive screen "PointScreen." This ultrasonic mouse device keeps discreet areas of where you've been touching your fingers—so long as they're within 1 cm of the screen—that is. Information is relayed to your processor in ASCII format via its RS232 port.

PointScreen can be operated with a diagonal length of 23 to 60 cm. Unlike most touch-sensitive screens, it does not require direct physical contact with the screen, thus avoiding scratching and dirt accumulation. Traditional displays also often obscure the image somewhat. Since PointScreen is mounted above and not in front of the screen, this problem doesn't arise.

Contax hopes to sell the product not only as an add-on to existing systems, but also as an OEM product—any that's incorporated into another product as a standard part. The whole package—hardware, software, driver, and several days training programs—rolls for US$592.

Contax Technologies Corporation, 1 Main Street, Brattle, VT 05444. U.S.A. Tel: (800) 433-3234.

ASK SAM

Askanam is a full-text retrieval system with extensive report and retrieval capabilities, and an automatic phone dialer. It's easy and fun to use, says its maker. You just put all your documents into Askanam file, and there's no learning.

Carneigie (CONJ.)

understanding rapidly spoken sentences as well as required to some extent to establish verbal communication. The system has been tested in three modes, each involving recognition of varying activities.

BEND ME SHAPE ME

Two new first-design programs for the Mac are due this month: Letmegan's Letter/Shape and Computer Control Fort Manager. Letter/Shape will let you vary the size of your arcade type from zero to 500 points (nearly 14 inches) wide. You can also adjust the stroke weight, adjust letter or word spacing, vary the weight of letters, fill a font with shadow, etc. Point Manager will allow your text to be translated into a bit-mapped format ranging from 9 to 127 points. It will also allow you to create a new size typeface and print it on your Mac's graphics monitor in your System Folder.

The two programs are available for US$1290, with a two-year upgrade package. Point Manager will cost US$1995 and include four upgrades.
INTERNATIONAL SCAN

The world-wide market for scanners is growing hotter each day," says Danec Watan, announcing the launch of Haungton Mifflin's OCR support package Interna- tional CyberScan. And Dent Corp's Chris Keever is looking worldwide too. "Making multi- lingual capability is our scanners' raison d'être, and they're building on this strength to break into new markets." With this strong background, the scanner line was named the CyberScan, and the program was built on CyberScan software. The new product will be available in December.

International Publish. Pac is the company's new subsidiary. The company said that the CyberScan line will be distributed worldwide, and that the CyberScan software will be available for all major operating systems.

In other news, the company announced the release of a new version of its CyberScan software, which includes support for the Macintosh. The new version includes new features and improvements, and is available for both Windows and Macintosh systems.

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LOW COST DIP WORKSTATION

HyperMed 2.0 is an archival and retrieval system for images as well as text and other multimedia data, and includes hypertext capabilities. It's priced at $1000 per user for a one-year license, and can be used with other HyperMed products.

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VDTs - ARE THEY TERMINAL?

With the rise in productivity of VDTs, there has been an increase in the number of VDT-related injuries. In 1985, 16% of U.S. workers were exposed to VDTs, and by 1990 this number had increased to 34%. This increase has led to a number of studies on the health effects of VDT use.

In one study, the researchers found that workers who used VDTs for more than 40 hours per week were at a higher risk of developing work-related injuries. Another study found that VDT users were at a higher risk of developing musculoskeletal disorders.

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County does not face radiation risk. A study published by the Kaiser-Permanente Med- ical Care Program of Oakland, California, this summer, found that the chances of developing cancer in women working more than 50 hours a week at VDTs was twice as high as in women working fewer than 30 hours a week. The study did not find a similar increased risk for men.

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FAST HYPERCARD LOOK-UP FOR CD-ROM

KnowledgeSet, of Mountain View, California, braggs its search and retrieval program for HyperCard stacks, HyperKES, due in September, will butt HyperCard's Find program to a wall of power. "I've yet to see one of our searches that takes more than a few seconds," says marketing director Chris Bowren, whose hew bigwig (tale HyperKES to search a 500 mb database.

HyperCard, Bill Atkinson's 1984-year-old program enabling ordinary Macintosh users to create their own Mac applications, stores information in a structure called a "stack." A stack consists of one or more "cards" containing text and images related in a way that the individual user or commercial publisher has specified. To find information in a stack, you activate HyperCard's Find procedure, which then cross all the paths for it. Although fast—our HyperCard reviewer claimed he found a word located in the last cell of 54 mb of text within four seconds—Bowren claims it's "inadequate, for very large stacks." HyperKES applications on CD-ROM, for instance, are expected to feature mammoth stacks. Bowren says HyperKES can search even a 600 mb stack in a few seconds, making it a very fast interface for large stacks, Bowren adds, "The computer is like a "storagehouse." He promises it and "like a storagehouse.

A chance to HyperKES, he claims, HyperCard is close to being able to query CD-ROM applications. The DOS stack, however, is better suited for CD-ROM standard and has to work for custom-built applications, Bowren says. HyperKES can query CD-ROM and any to work for custom-built applications, Bowren says.

The HyperKES package contains two programs: HyperKES, which is a stand-alone database interface, and a port called HyperShock. HyperKES allows customization of the

BACK TO HANDWRITING

Countless revolutions in input—none of them HyperCard—of Reston, Virginia, has launched a laptop without a keyboard. Instead of typing input, you write it—just like back in the old days.

But before you hurl yourself under a video display, look ahead. There's nothing back-looking about Linux. What you write, either a pen-like stylus, is a glass screen. The computer then converts your handwriting characters into ASCII code. Linux Technologies calls its invention, WriteTop. The first model, shipped in July, sells for $199.95.

"Most conventions are fairly straightforward," says Bowman. Conversion of Microsoft Word or MacWrite data is taken place automatically through a filter. Bowman also foresees the emergence of a new type of small firm specializing in the conversion of company database into stacks. HyperKES is to be marketed through advertising and put on the virtual market through value-added retailers. A development starter pack, containing everything a developer needs and one copy of the HyperCard source system, costs $389. Publishers will pay US$180 for each rep of each republic.

"The HyperCard stack is a virtual database," says Bowman. Conversion of Microsoft Word or MacWrite data is taken place automatically through a filter. Bowman also foresees the emergence of a new type of small firm specializing in the conversion of company database into stacks. HyperKES is to be marketed through advertising and put on the virtual market through value-added retailers. A development starter pack, containing everything a developer needs and one copy of the HyperCard source system, costs $389. Publishers will pay US$180 for each rep of each republic.

If you need to reach decision makers, you should know that LT's readers include some of the most influential people in the Language Industries.

For rates and more information, contact Sales Director Jane Metcalfe at our Austin office 1301 N 450.034.

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LINGUA-28 FRANCA

INTRODUCING IT'S NEW LINGUAGRAMA SECTION TOUSING SPECIFICALLY ON WORKING IN MORE THAN ONE LANGUAGE

JAPANESE WP RIVAL

Anato no pounzou, we all go
directly to the Lexus when we write English and Anglo-
phones who write Japanese, listen wp. Self-effacingly
called Diet Systems has just
delisted Diet, a wordprocess-
ing program for the NEC PC-
9801 series. Featuring advanced
features in both languages -
and online Jp-Eug and
Jp-Eng dictionaries.

In a market that has tradi-
tionally offered products good
in one language or the other,
but never in both, Diet is a
welcome debutante. Diet's
Japanese/writing-processing
functions are similar to the
market leader Ibaraki. French
English functions like proper-
Forman, hyphenation, justification, wordwrap and
off-boxing supplement the
Japanese capabilities.

Diet's really new twist is to
40,000-word (1 MB) multi-
function dictionary, which you install on
your harddisk and whose search results you transfer
directly into your document. This feature is in all likeliness for
200,000 yen.

Despite the close similari-
ties, Diet files are not com-
PATIBLE with those of Ibaraki. The combined price of word-
processor and dictionary is 58,000 yen ($115).
Junt Systms Corp., 9-46
Ohdai, Koto-ku, Tokyo 106.

TRANSLATION ON COMPUSERVE

Since 10 July, US translation
companies have been offering its
services free for the
Compuserve's Electronic Mail
Corpus. It's the fourth
electronic mail system via
which they can be reached. The
others are Western Union's
English, Deltel, and ITT's
Update.

The company also markets
its own range of PC-compatible
CAT software, the Translating
Word Processor (TWP). And
four new languages are being
added to it - says general man-
ager Tim Rowe - Portuguese,
Haitian, Dutch, and Chinese.

TWP Translation Services,
with offices in NYC, are
moving from Virtu's Ivory, both in
Virginia, to a subsidiary of In-
technology Inc., a diversified international
holding company based in New York City.

Linguistics is just beginning
to recover from the Chomsky
revolution. Thirty years after
Noam Chomsky's Syntactic
Structure and the birth of
genitive grammar, skepti-
cism now sympathetic formalism is
on its way back in the world-
wide linguistic community.

Thus speaks Prague Uni-
versity's Professor Sagal at the
XIIth International Bin-
ational Congress on Computa-
tional Linguistics, COLING 88
(Budapest, 22-27 August).
Sagel had been neglected
long enough, and Sagel
Eclecticism, non-linguistic
statistical models, and
methods derived from the
engineering disciplines all had
an essential role in the
decomposition description of
language.

The conference had 600
participants from 25 countries,
100 papers, including about
a commercial contingent includ-
ing IBM, Philips, B&O, and a
number of Japanese concerns.
Some 150 papers were
presented, machine transla-
tion was the single most widely
discussed topic, and far from
goals expressed were unreservedly optimistic.

COLING chairman Martin
Kray warned of the effects of
telecom when speaking from
a production-phase PTI.

DE-COMSKYFLATION

AND OTHER NEWS FROM THE YEAR'S CTO'S CONFERENCES ON COMPUTATIONAL LINGUISTICS

CAN CALL SAVE LATIN?

U.K. Latin teacher Terry Bird and colleagues Pete Sanders and
have developed a CALL tutorial product that they claim can turn
learning Latin voces, vocabularies, and translations from "boring"
into "riveting."
The product, called simply "Latin," is aimed at
students for the new (16)
GCSE English and Latin. It
covers only three main components, covering general rules, tests, and
worksheets.

The book's component contains an excellent glossing board
workshop, in which vocabulary is sorted on word-class. You can test
your knowledge of word meanings - first through a multiple choice
part and then through a follow-up exercise where you fill in Latin
equivalents to English words.

The case and work form consists tests you by means of fill-
in and translation scenarios. All main vocabularies and verb
conjugations are preserved, and there are separate sections on
verbs, nouns, and adjectives.

Unfortunately, the product is only available for the BBC B
system, produced by Groll's BBC Ltd, and requires a
Workstation Monitor Ltd. (GM2). Also, enjoys a
commercial-imposed bounty, is the supposed lack of educational
areas - a state of affairs highly resented by many U.K. teachers,
including Sanders and Bird.

All the same, Sanders and Bird are hoping their product will
do its bit to fight falling interest in the classics, the benefits
of which, Bird claims, are as relevant today as ever: "The logical word
training involved in Latin is an excellent preparation for computer
programming, better than maths."

Its titles: "The Head of IBM
U.K. immediately, is a classic."

"Latin" costs £39 plus £15.95 postage (US$36.70)
Info: Pete Sanders, 2 Laurenciates Or.,/Crouch Hill, London N4
UK. 426-770. Terry Bird, 159 Norwood Rd, Islington, B&O 2P 1
U.K., or 355 Homestead Rd, Newark, DE 265.

Linguistic says the briefing
was part of the deal Lea-
tor used to secure an ind (continued on next page)
FASTEST LOOK-UP PROGRAM?

Oppenweiler, F.R.G.-based Chris Bivens, whose niche-per- sonal software and Translation Entity company has produced Super-lex, claims it's faster than either Terms or INK TextTools and far easier for users to browse. Profiles drop by 50

Superlex is a memory-resident glossary-look-up program developed in Turbo Pascal. It enables the translator to create up to ten main dictionaries, each supporting one source language with four corresponding target languages. The dictionaries are also divided into subfiles, each with a maximum size of 30,000 words, for a total of 180,000 words. The company itself is preparing a wordlist to let the translator start. So far, German-English, and French-English have been written, with plans for Dutch and Swedish soon, according to the future.

Micro-driven Superlex is user-friendly, allowing users to access glossaries and choose language directions, and a forthcoming upgrade will allow the direct addition of new entries via the window. Entries are located using either list or search methods.

Superlex can be used with all popular WP programs for PC-compatible. For speed, a back-end is available. Price: IPDM-4000 exclusive VAT ($560).


LEXPERTISE (CONT.)

strongly recommends, in light of the fact that ALP employees had to come in and develop the linguistic software. "The focus is to boost any former ALP employees," Bubba adds.

Leargiraffe's ambitious plans include developing several working products, including an IRBACG-based speech-to-text research machine and UBS Proof versions for all major European, languages, plus UBS Proof for Japanese and Hindi, as well.

Peter Batten
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tremely interested in machine
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translation and related areas,
"There's as much distinction between one word processor and one desktop publishing program as between one word processor and another word processor. It's not a different system; it's more a matter of the company's positioning. It's the distinction between Lotus 1-2-3 and VisiCalc. They're not a different species, they're different generations, different versions, different visions."

Phil Florence, chief architect for word processing products at Ashton-Tate, on the confusing distinction between word processing and desktop publishing.

"I see newspapers up to 10-point type by the end of the century, even 13-point for some magazine articles. Everybody likes big type. It's a trend."

Roger Black, the US designer who set the style for a generation of American magazines with his work on Rolling Stone, Newsweek, Outside, and others.

"On the most general level, software doesn't do enough, and what it does do is too difficult to use. In other words, there are islands of success in a sea of frustration. There's no software yet for people who work with ideas and themes of information, the way a word processor is for people who work with numbers. Everybody I know gets frustrated with their PC at one time or another. At least twice a week I want to throw the whole machine through the window. That's a sure sign that we haven't reached a fine level of sophistication in software. I don't think that fact is taken into account by most people in the industry."

Mitch Kapor, inventor of Lotus 1-2-3 and founder of the New On-Technology, a company to explore new directions in software, commenting on the sorry state of computing today.

"By the end of the century, 60 percent of Europe's workforce will work in or be dependent upon communications and information technology. World trade in these areas is currently $650 billion. How much of it now Europe wins in the face of competition from the US, Japan, and Southeast Asia? Consider that Europe today spends 0.38 percent of gross domestic product, 0.61 in Japan and 0.83 in the United States."

Michael Hardy, of the European Commission of the European Community, speaking at the opening of the UK Rank Taurus research facility in Cambridge, EuroPARC.

"There are approximately 174,000 business sites in the three major markets in the United States. Although the corporate market is 50 percent of these sites, the consumer and commercial markets will account for an estimated revenue in excess of $1.3 billion."

Vera Allen-Samih, director of electronic publishing marketing analysis for Datapoint Inc., a fast-dwindling market research company, commenting on the size of the major markets for electronic publishing.

"I thank you for your challenging review."

Peter Newmark

CORRECT TEXT NOT INTELLIGENT

Dear Editor: Since your recent piece on Houghton-Mifflin's Correct Text spelling and grammar correction systems (LW&F, p. 8), I felt I should clarify some incorrect ideas about their nature and origin.

The H-M English spelling corrector was the first linguistically based system and is now available under several different brand names. It was funded by Houghton-Mifflin and developed by David Durand, Jacques Marchal, and myself. We have written the software which runs on our own mainframe and is also available on several other IBM compatible systems. It is based on the first dictionary to be written in English, Webster's New World Dictionary.

The particular grammar which the system uses was derived by Andrew Mackie and several consultants from the Brown University Department of English. The market was not so much a matter of sales as it was a matter of trying to come up with a new, more accurate method of spelling. There are several companies which sell this dictionary, and we have written a dictionary which is used by several other companies. The market was not so much a matter of sales as it was a matter of trying to come up with a new, more accurate method of spelling. There are several companies which sell this dictionary, and we have written a dictionary which is used by several other companies.
A UNIVERSE OF WINDOWS

BY CHARLES HUGO

I picked up a copy of the "The Visual Technologist" by Michael Daitny recently. This book covers writing programs which are portable among the true text graphics user interfaces (WIMP's) for microcomputers. The book contains Microsoft Windows SDK Presentation Manager, the ASCII and GMD for the PC and Atari ST.

I was struck by the basic simplicity of the structures provided by these systems. Of course, they differ greatly in detail and architectural concepts, but I think that their overall simplicity stems from the fact that they all deal with the same basic thing - signs from keyboard and mouse, a bit-mapped screen, Windows for displaying information, and sections for drawing graphs and displaying visual data. They are also, incidentally, all based on pioneering work done at Xerox PARC's research facility in the '70s.

Unfortunately, the systems are different enough to make it extremely difficult to make a program that runs on one environment and get it running on another. Even System V from Digital Equipment Corporation or Presentation Manager do not present an identical set of services for the programmer. This is also true in recent releases of Solaris 3, Sun's OS/2 and Microsoft Windows 3.1. In other words, I was impressed by the completeness of the "look and feel" of these systems, which would allow smooth compatibility of existing software.

No doubt, to get the maximum possible performance, some machines-specific features would have to be used, but these could be reduced to a small number of external hardware devices. In any case, the programmer's job would be considerably simplified and more time could be spent on the programming code itself - the bits that the computer has to talk to the programs for the first time.

It is a small step to the next logical step which is to build a graphical interface which can be extended to communication with other services, mainframes and minis. The existing communication standards were designed for mainframe terminals, and computers are not intelligent. I don't know why there are "hex," "exec," and "look" to type in cryptic commands, rather than "It's a way of keeping users on-line longer."

I'm not sure why we can't just use your PC's menu system to generate computer- and display programs, and what is more, previously unused features could be saved for display if needed - thus avoiding the "hidden re-invention of the same wagon wheel" again and again. The next natural step is to pull out the "Gnome" menu and click on "Mail Main" - more searching in quick reference cards.

KEEP IT ONLINE

As you are getting tired of reading this, Microsoft besides the ultimate writer's tool? You don't have a "broadband" line running across for a CD-ROM Direct? Well, you can get a lot of similar functionality from relatively cheap packages. Also, don't you just use the "Magic" part of the American Heritage Dictionary on a 2MB hard disk? If having online dictionary is just part of your personal alphabet soup, then you'll have no fork up. For the rest of us, there are some neat little 2MB tribble

"mail main" and "reply resident," or RAM resident programs for DOS and DAI disk accessories, for "mail main".

If your programmer's and writer's access to DOCR and QW reference materials, try Peter Pan's "Newton's Guides" (text only) or "Softlink's" "English" (text only). There are several ready-to-use "magic" chlorine-137 and "above ground" virtual machines. Also, you can compile your own modified from standard text files. You can then access them at any time. Once you do, which requires around 70K of disk space.

To update information in the graphic interface program, Reference File by Roderick Software is what you need. This is basically a reference file publisher which you can call up at any time. You can also define your own index cards and search for indexed key words. For database management, there are many other information such as "airline" and "bills," but the real beauty is being able to just type in keywords and be able to search for "airline," "bills," and the review -version locked up the computer several times. As a unique and extremely useful program. The ability to type in information whenever you want it is much more useful, in some cases, than read-out type programs.

If you need dictionaries, Presentation Manager offers a very abbreviated "Dictionary Reference" which the Collins' bilingual dictionary for the Macintosh and Vax, plus a "dictionary" by Hypercard. If you want to view them while using other programs, DataEase software makes "SpellChecker Pro" for non-dictionary, which is included in the Promissary Microsoft Windows dictionary. I have no fancy of any "bilingual" dictionary programs for the Mac. Please drop me a line if you do.

ENHANCED KEYBOARDS

When the IBM key or enhanced keyboard was introduced a few years ago, it was seen as more or less a typewriter. They should never have put the function keys on the keyboard, no matter how wide it would expand them. The "main Control" and "Alt" keys are useful only for Unix systems, and like the Copy break, but I haven't really used them to function very much.

Still, I suppose the thing Stinger and those other producers - and not only on IBM compatibles, because (while carefully saving my reference to IBM) Apple's Macintosh extended keyboard is just an extension of the "mainline" small menu key label changes. That is, there are programs while both the IBM enhanced keyboard layout and the "mainline" version is useful for new computers, and then the old. But it is clear that the original keyboard will be something that should be handled the "broadband" way.

PLEASE WRITE

I'm grateful for any comments, questions or Hints that you may want to send me. If you want to send any information, please mail it to "Office of the President" the University of London, England, Great Britain, ROYAL 46-48, 1064 NW, Amsterdam, Netherlands.
NOTABENE'S STEVE SIEBERT
PONDS WHETHER BUSINESS ETHICS ISN'T A CONTRADICTION IN TERMS

Dragonfly's NotaBene is the doyenne of word and information processing for academics. The program is based on the wordprocessor XyWrite 3.1 and freeform text retrieval system FYI 3000 Plus. NotaBene is thus both a multidisciplinary information processing system with numerous academic writing features and a text retrieval system that lets the user retrieve notes from within the wordprocessor.

The manual is thicker than the New York Yellow Pages, the reviews admirationy, and the price reasonable. Yet, Dragonfly founders Steve Siebert (36) and his wife Deborah Neuman (37) have so far sold fewer than 10,000 copies of NotaBene, and pessimists have expressed doubts about the company's future in a world of giant software companies.

Steve Siebert told his story to LT associate editor Peter Rutten.

"I was born in Japan, where my parents were Methodist mis-

sionaries. They were sort of withdrawn from the world and
tend to have witness to what they believed to be the truth.
I lived in Japan for 15 years and
was very much shaped by it.

"I met Deborah while living in a
tiny apartment in the
Kodansha building in
Brooklyn, where she was
editor. Getting into comput-
er science was something very different for someone with my back-
ground. I'm a closet Saddic
in action. I feel that mu-
culture isn't so very much, at
least not the things that matter
in the world.

"On the other hand, I am, having
spent the past seven years of
my life working with comput-
er science, I sometimes feel torn by
this. Why am I doing this, pro-
ducing sophisticated wordpro-
cessing software? Am I provid-
ing what people really need, or
am I providing some new tool to
the people who are more privi-
leged and who have all the
choices anyway? That's a part
of my personality that inevit-
ability shapes the company.

"On the other hand, I've always been very interested in
new technology: When I was a
graduate student at Yale and
we took our qualifying exams,
we were told that you could
either write them out by hand
or spend the same amount
of time typing on a typewriter.

"There were three people in my
class of 36 who had a type-
writer. And I had the fanciest
one, an IBM Selectric.

"So while we potted away
for six hours, I remember
thinking that even though the
professors had told that
body would get extra credit be-
due to their exams, I couldn't
understand how they thought
how they would be influenced
their reading of the way, Nor-
body writing by hand for an
hour could write nearly as
much, and their handwriting
would be ultimately illegible.

"DON'T GET A COMPUTER
"Right after I began my disser-
tation — it was on the 'Bran-
mell' of superconductors — I've
finished it. The IBM
was introduced in the U.S. I've
been thinking a lot about
getting a computer, looking
around, reading computer
magazines. I went to the com-
puter lab at Yale and asked
about buying one. They put me
off, because it's too much
time to learn. They said 'Fin-
ish your dissertation instead.'

"I borrowed $4,000 from
my parents and got an IBM PC.
This was early November 1981.
I had one of the original PCs in
New York, never having even
touched a computer before in
my life. I got the IBM PC be-
cause it had a detachable key-
board. I felt that if I needed a book,
I could punch out on the
keyboard typed my reaction or
quotes and so forth.

"I didn't want the printer. IBM supplied, because it only
had 10 pins and I'm a Word
follow. I decided I needed 13
pins in order to write my dis-
sertation. I bought a Bibet 8510

"This was in the days of
WriteWrite. You couldn't even
get an IBM printer to do things
like underline properly. So
here I had this printer that
didn't work with WriteWrite.
There weren't but half a dozen
people in the city with an IBM
PC, and I had to try to get it to
work.

"It took me a week to work
through the user manual. But eventually I
was able to figure out how to get
the printer to work. After
I thought: Hey, this stuff isn't
hard. I continue to work on
my dissertation and at the
same time started consulting
on computers.

NOT THE RIGHT TOOL
"I'm not sure where I stand
when I realized that neither
program was the tool of
my dreams. They wouldn't footnote or do a
research. And most importantly, there wasn't a
program that could return a fre-
form text retrieval capabilities.

"The best tool for academic life would be a program that
in the type of your notes, and then when you're
writing, review every refer-
ence to, e.g., Marx and Engels,
but not Freud. I really wanted
be able to do that.

"I looked around and was
interested by a program called
XyWrite from Xydius in
Massachusetts. This was a
company that was working on
a text retrieval system, called
FYI. When I got to Texas, I
failed to find it. But these
products came out and they,
They were afraid the device would overwhelm them, steal their lives away.

This is one of our difficulties in going against programs like WordPerfect and Microsoft Word. Academics will still largely say: "These programs do what I want them to do. They're really good wordprocessors."

If we need to show that our computer software isn't for you without restfulness you impoverish... though they'll never do enough to make the earlier claim true.

FOUR YEARS OF UNCERTAINTY.

"We're a team of a company that, if it is three years or more that the program has been developed through to survival blood, fifteen hours a day, seven days a week, for the past five years.

"We do very little advertising. You don't see us on PC Magazine. We thought we'd have a unique market. Program. We would do is produce the best program an possibilities, could everybody... badly. we don't have anything to recommend ourselves.

"We've always preferred to put money into development. One page is PC Magazine. for one year costs more than a year of development of a language program.

"It's turned out that we really do need to market. We're not bringing in more people to marketing -- Peter Wheeler, one of the founders of Lotus, for instance...

"To convince us that we could be feasible for our own use in future, without becoming a part of WordPerfect or Microsoft. I'd deduce the next thing you don't care doing things unless you're a certainty. We're really we have about twenty people working together, which is one hundred per cent of their size, but we're located..."

NOT LIKE WORDPROCESS.

"I have very personal reasons for not wanting to become like that. I couldn't think what to do if I made a lot of money, for one. I think it should affect the life of the like for the bureaucracy in New York some, there are forty-two process of dictionary with our..."

PHILIPPE AMIAND

ENGINEERING OUT ON THE LANGUAGE V ECTOR

In a modest 3rd arrondissement apartment, far from the center of the city, a rather brash new information brokering outfit, a fortunate from the doistred traditions of the French paper industry, is the snappy porte-manteau of Intellisearch. Philippe Amiand's new service -- lexicographer and computer.

THIRD OLD PUBLOUSERS

In fact, the gentleman, with the quick smile and rapid voice in a self-taught linguist's accent -- he's a third of the language industry, always ready with a smile and an array of bright ideas to help fit wherever language is a problem in communications or information systems.

"After about two working on an issue, I'm not a third of computer science but we have not yet put into Intellisearch in 1983 to handle the technical side of dwarfs, an anagram..."
of the big participating publishers, including Harcourt, wanted to be the first to stick their heads in their pockets and finance more work. What resulted was what everybody calls "truly horrifying ignorance of the possibilities of digital publishing." That the people had a profound lack of technological culture is easy to make the right one.

Experience has taught Amiel that traditional paper-dictionary publishers are not at all one might expect, manufacturers of the kind of goods people who sell paper with print on it as a profit. For instance, Amiel doesn't believe that Hachette's recent purchase of US electronic dictionary publisher Granger implies any change of heart toward new information technology. "Differentiation for a publisher is simply a means of using its current outlets to push more stuff, not develop new ideas. Hachette's abandoning its lexicographical projects and then buying up Granger is nota para- dox. Hachette simply wanted a feel in the American scene, and Granger provided it."

Amiel put a lot of work into Eurotext, but claims he's not bitter about the outcome. "I have a lot of faith in new - if not all - the publishers, and I think that they will develop a functioning database. But the idea of a single large database 'onetext' should be. The 'Eurotext' standard, designed for use by the other Eurotext publishers, is not a standard database that could allow a single multimodal dictionary to be generated."

When the end came, Amiel had left the publishing house and was staffing and rethinking publishers' concerns of communication, but just on one client, especially a technical one. "I worked a lot with that paper, spells inside the language of the dictionary."

VIDEOTEXT Re-enter the language engi neering language engineers and a group of dedicated wordsmiths. "Our approach is to select methods and concepts within the technology of the existing database, and to add it to the existing database as an interface for the user."

VIDEOTEXT Re-enter the language engineering language engineers and a group of dedicated wordsmiths. "Our approach is to select methods and concepts within the technology of the existing database, and to add it to the existing database as an interface for the user."

"The challenge of multimedia is to make the user's experience personal and individual. The glossary can be seen as a virtual dictionary, which will gradually lead the user through a map of stereo technical terms. One thing we have realized is that a sophisticated knowledge base is available to the general public who will have to have a grammar back of so, says Amiel, but he isn't giving away the secret of his recent discoveries."

A NEW LEXICOGRAPHIC (Language) Lexicographical work program for CD-ROM technology is also going on for unspecified clients, and Amiel remains unimpressed by the recent Link Language Protection that only some 200,000 of a predicted 20 million PCs will have CD-ROM drives by 1990. "Everyon e has made mistakes about the CD-ROM market. In reality, CD-ROM producers are waiting for more drives, and users are waiting for more products before they'll buy a drive," says Amiel. "It is never what manufacturers think."

What Amiel is particularly interested in is a new system that allows virtual access to different user needs and filters from the literature. "That's the key issue of this system," says Amiel. "We're living in a world where different users need different information and different needs, and people want to store on their own computer."

Everyone agrees that there's plenty of interesting products around, but no one has done any useful work on how videogames can be improved."
By Vicky Hearne/Photos by Hans Hendriks

Controlled English is hailed by some as a boon to technical writing. Vicky Hearne disagrees. She accuses its "pseudo-literate" proponents of advocating an unnecessarily debased form of human language. And "fulminates" that it shores up rather eliminates lazy thinking.
When a child calls a horse a dog, we tend to call it "a mistake," but using a word that way to cross back and forth over the boundaries of a concept is exactly the way people lay the boundaries of a concept and the territory on all sides of it.

Pseudo-literacy is an active principle, hostile to thought and clarity, that replaces language the way some poisons replace the nutrients the body needs.

IN ANOTHER PART OF THE FOREST

grammatical note of this sort is typical of the phrenology we've called pseudo-literacy, and it claps through. Great editors such as Harold Robbins, without even thinking about it, have always battled it valiantly, as do writing teachers who don't themselves happen to be afflicted. It can happen to anyone—like AIDS—but it wasn't until recently that it superceded mechanomorphism, the belief that attributing the traits of machines to living creatures increases the scientific holiness of a theory, extended to the point where companies will actually pay money for pseudo-literacy, when what they fund are employees (and bosses) who can read and write. What is especially distressing is that the phenomenon of people selling lessons in a Controlled English isn't even called a scam. Like evangelists, its promoter appears to believe in these very pages. A philosophical view that emerges from the rules given above for Controlled English is that what they are making is a弥(MIN)129 that no trouble with. They are also rules that make the human being and no dog can obey, not because human beings and dogs think independently, but because we're primates, unlike a computer, are not surrounded by combinations of two fundamental impulses, and—data points ("In Another Part Of The Forest") in an initial state, just like a pet, for example, your dog's training pays devolved in "In Another Part Of The Forest," you try for a breadcrumb of that, an explanation; the whole project will fall apart, because in Another Part Of The Forest in that cannot be ana-lyzed. The same thing happens when a philosopher is in full tracking mode, which is very Wittgenstein, usually ignoring everything his teacher tells him about experience prior connections between the concept position and another, and just mindlessly repeating "kitty" masters "new-kitty," "big-kitty," the proper name, "kitty," and not "like kitty" (because unfeeling) as well as "good-kitty," "bad-kitty," and "fussy-kitty." To master "kitty" is also to know how to trip, or use words figuratively. Therefore, for example, "kitty in bed" with a appeal of delight when the cat jumps into the drawer full of ills is not. And then the literal is neither logically nor historically prior. Calling a horse a "fiddlestix dog" occurs as part of and post the mastery of the concept "dog."

THE TYRANNY OF TESTING

When a child calls a horse a dog, we tend to call it "a mistake." But using instead that which will come back and forth over the boundaries of a concept is nearly the way people learn the boundaries of a concept and the territory on all sides of it. That's why an IQ test might ignore the following sequence, expecting child to fill the odd man out:

1. Dog
2. Horse
3. Table
4. Dog

The "correct" answer could be either "Table" or "Bird," depending on whether two is organized as containing three elements and two parts of territo-ry, or three things with four legs and one with two legs. The legs of a table are there, of course, by grace of trope, therefore called "dead metaphor." In The Tyranny of Testing, Jacques Barzun collects standard sets of achievement and intelligence, in part because of the frequency with which it turns out that there are two or more answers, and that the item is not a test at all, but a series of interconnected or deliberately ignored by the testing agencies.

If you plug a machine into a wall socket that means that "kitty" and therefore is an example to a pregnant teacher and Aunt Katherin, it will have no trouble with. For people, however, knowing the verbal meaning of is to mean in a manner of knowing a list or a definition. Cynically this list:

- fed the cat
- fed the dog
- fed the horse
- fed the iron
- fed the baby
- fed the goldfish

The physical movements these ex-pressions describe have little or nothing to do with each other. Feeding an idiot to one's breast is not like tossing a flake of hay over a fence, or showing a Christian into a fountain, or feeding a fish over a bowl of water, but an ordinary speaker of English has no trouble understanding that, in each case, the verb has "the same meaning," and further that this is a literal mean-ing. A native speaker learns literal meanings by projecting these into new contexts that is by making conceptual leaps into the words from behind fish-feeding horses.

Sometimes we feed the dog a metaphor, as whenever we "feed the meter" or "feed my rap." But it's hard to say what it is about those logs that are metaphorical rather than literal, especially when
Learning that takes a while, not because dogs are dumber than people, but because the dog, like the human body, learns by trial and error of exploring the term in new contexts. Say the dog is in a kennel dog named Ashley. It used to be, before we had worked so much on "sit" that she glanced me by jumping against the gate, waddling, and picking up her food dish and tossing it about. Suddenly one morning, she greets me by sitting, very formal and square, and lifting her muzzle up into the posture that makes it easy for me to put her collar on. If I accept this greeting in any way at all—for, say, cradling my own pleasureably—"sit" will now mean "I'm glad to see you and ready to work." And by the inscription "Go" here, I do not, of course, mean "my utterance, but the posture, gesture, the dog that didn't learn the label I have not applied the dog to mean "I'm ready for work," but the dog has projected this "term" so that it now does.

That capacity on the dog's part to project terms through complex paradigms of topic is how it comes about that for an obedience-trained dog, the formal situation of sitting at your side, prepared for the next command, comes to mean "I'm ready to go." (Or I don't know what that noise is, boss, but I don't think it's "guilty." "That man isn't drunk, he's dead," and because language is at least four-dimensional and of the projection connectedness, the possession in formal work may also come to mean the not entirely unsentimental meaning: "I do not know how this garbage came to be in the hallway.")

Formal training, of course, is in part a matter of keeping these housing meanings under control. In an obedience trial, you don't want your dog to respond to your gestures, explaining with new meanings of "sit." Knowing that, say, reassuring is different from this, that in mathematics, definitions and meanings have still better than they do with dogs and children.

**MEANING IS USE.** But consider the following debate over the philosophy of mathematics. A circle obtains from "all the points equidistant from a given point." Yet that definition can be used to make a square in Euclidean geometry. In a city laid out in square rather than circular streets, a cabdriver who took passengers to all the intersections exactly three blocks from, say, the corner of East Third Street and Jefferson Avenue, would describe a figure: that is, by the definition given above, a circle.

When a conceptual disturbance like this shows up, and one's impulse is to say "But that isn't what we mean by circle," which means something like "That's not how I'd use the word circle!!!" That is why Wittgenstein said that meaning is use, thus pointing to the idea that the life of a concept is not to be discovered in a dictionary or a logical or grammatical rule, but rather in the interchanging precisions between the word and the world.

- A mathematical subject, as opposed to a definition, can of course pretty well exclude this interpretative "square circle," because within the subject there will be theorems to the effect that a circle related to any degree is equivalent to itself, and so on. My point is that the way you learn, formalizes, and define a term is not through a rule of the sort that has "may" and "may not" in it, but through a matter of thought. And, as Jakobovits, Wittgenstein, and others have shown, the nature of language is such that even in mathematics and the most accurate and productive unhappiness of use a set of half-assed "rules" about writing instead of genuine thought to miss an accurate account of the colloquial by so much as a comma.
The rules for Ericsson English Level 1 are ones my old Macintosh 128 had no trouble with. They are also rules that no human being and no dog can obey.

words writers use arouses the primordial bard's sullen wrath ...

But there is no such thing as a primordial bard, wrathful or not. Real poets, with a mastery of language undreamed of in most mortals (although not in Wittgenstein's), are the most submissive of all writers to "external" constraints. Each syllable, stress, pause, comma, and vowel is weighed, counted, counted, and measured, and the domain of reference is controlled with exquisite care. They are perhaps students who are first hearing, say, Shakespeare's or Frost or Goethe's sentences pointed out to them: it looks like magic, or terrifyingly beyond them at any rate, just like Olympic figure skating or gymnastics are beyond what I do when I fumble my way out of bed in the morning.

If you want to know what English is like when it is under control, study poetry with someone who knows what they're doing, and try your hand at producing as many as 20 syllables that are as well controlled as Hamlet: There is no more any such thing as "the primordial bard's sullen wrath" than the primordial mathematician's sullen wrath. Of course, both poets and mathematicians can get cross about the vagaries, frustrating things phrases and other riffs say about their disciplines.

They even get wrathful. I once heard the great applied mathematician Gian-Carlo Rota, for example, fall a torrent of dignified and aggressive philosophy that their efforts to characterize mathematics caused them to look to a true mathematician like a child straining on the pony. And when I watch certain enthusiasm for Controlled English in action, it is like watching a child who isn't even find the pony yet.

This manner or moods, because the pseudo-literacy and pseudo-thought that result from inextricable notions of what language is and what it is to have control over it over do not converge simply to an anti-

The rules for Ericsson English Level 1 are ones my old Macintosh 128 had no trouble with. They are also rules that no human being and no dog can obey.

safe electrical stimulation feels the dog as if something physical were happening.

I happen to know that the author of that sentence is a Controlled English enthusiast. I also happen to know that dog owners, residing or not, do not notice the grammatically halluci-

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Four writing systems, thousands of characters, several completely different pronunciations for each character, but only ten fingers... Attempts by the Japanese to automate their orthography have always tripped over this first and fatal stumbling block. After a thousand-year wait for a faster way to write things down, the wapuro (simplified Japanese pronunciation for “wordprocessor”) has finally come to the rescue. Now the problem is what to do about the wapurobaka — the wordprocessor “idiot.”

Some 1500 years ago, the Japanese came round to the idea of getting what they were saying on paper. So, as in all things — from rice planting to religion — they looked to their neighbors, the Chinese. They should have known better: Chinese is an inflected and tonal. In contrast, Japanese is inflected, non-tonal, and quite unlike Chinese. They couldn’t have made a worse choice. But made it they did, and they’ve been stuck with it ever since.

The Japanese began by borrowing lots of Chinese characters, which they called kanji and retained intact for their pictographic or ideographic value; those for sea, for example. In addition, for each character they borrowed, they also borrowed a Chinese word. The result was that they soon got used to pronouncing each kanji character using either its corresponding native Japanese or its — Nipponized — Chinese name. Even today, practically every kanji character has at least two distinct pronunciations or “readings” — one Japanese and one Chinese.

Since those first tentative borrowings, the dupl-
The Japanese used two parallel inwari writing systems: 46 symbols to represent the 46 possible syllable sounds and a fully compounded system with 500 or more symbols to represent individual words. Hiragana and katakana, together known as kana, are used with either kanjis to represent Chinese loan words and names. Hiragana and katakana were introduced to supplement, not replace, kana. In modern Japanese, hiragana is used for inflection—mainly verb and adjectival endings indicating tense and level of politeness—and katakana is used for foreign loan words, onomatopoeic words, emphasis, and contractions for feminine names. Sound confusing? Good, that was the aim. Written language was traditionally the property of the educated ruling class. And many invested a great deal of energy to keep it that way.

SIMPLIFICATION, WELL SORT OF...

"Why modern," one may wonder, "is a country that is now one of the most literate in the world, do they perhaps with this orthographic miasma?" Why don't they just stick to kana? O verdant—like the Turks, Vietnamese, and Koreans before them?

Who knows? It would be because in their own script, they're not used to putting spaces between words. Or it could just be that they like things the way they are: that’s how they're emotionally attached to their own script and maps. Maybe reading Japanese is a Roman script is like reading Shakespeare in the International Phonetic Alphabet—a bit stilted-looking. But after all, we Anglophones are attached to what we are to the eccentricities of English spelling—are not personal names of American when it comes to orthography.

There may be, however, another more practical explanation: the large number of kanji-style hiragana that sound alike but have different meanings, like bear and bear in Japa- nese. It is the role of this piece to tell you Chinese, its lack of the type of Chinese characters that only does Japanese have been written in the same, or unpronouns, from Chinese, its lack of the four sound the same. And through my text, every word is written in kanji to fix the word or color.

1966, with Japan in shambles, seemed like a good time to tidy things up a bit—keeping the pronunciation the ortography. A string ranged from matching kana to kana to making French the official language. The American-backed govern- ment finally pushed for simplification. It ruled that in addition to kana, only 1,250 of the thousands of

Needless to say, Japanese typewriters don't look like your typical Smith-Corona portable.

Trays of thousands of metal character blocks have to be loaded into the machine before typing.

Chinese characters, and a limited number of read- ings by each character, should be used in everyday writing. Although some are written using kana.

TYING JAPANESE...

However much simpler Japanese writing has now become, there's still a huge difference between the
The automation of words that the West first experienced in the early seventies, is only now hitting the land of the rising sun. In Europe, the progression from writing through typing to wordprocessing has followed a gradual evolution. Japan, on the other hand, has been catapulted from brush pen and paper to the world of harddisks and wysiwig graphics integration in just a few short years.

2,000 old characters: Japanese is now reduced to the 28 Roman letters of English. Needless to say, Japanese typewriters don't look like your typical Smith-Corona portable. Trays of thousands of metal character blocks have to be loaded into the machine before typing. KANJI characters are organized according to their Chinese readings, of which there must be two or three. In addition, many Chinese readings with homonyms are represented by as many characters as there are homonyms...

Let's say, for instance, that you want to type the word for “interesting” - うれししい (“urashiishii”). It's made up of two characters: うれし ("surii") and しい ("shii"). To type it, first you have to find the Chinese reading for “surii”, which your year of study tells you is san. Next, you have to read through the characters for "shii" until you find the one meaning “shii.”

Now "white," or し ("shi"). The Chinese reading next. You search through the kanji character tables for "shi" until you find the one meaning "shi." And that spells "umami." Interesting? Not if you have to do it all day. All that effort for just one hiragana character, they could be integrated into a slightly enlarged standard keyboard.

Yet another problem is output, printers and screens. A 5 x 7 pin block is fine for 4 to 7. But 24 x 24 is the bare minimum for good readable, Japanese, and many wordprocessors even find that a bit crude, thus setting the 48 x 48 pin printer well on its way to becoming the standard in Japan.

However, all these difficulties were eventually overcome. In the fifth month of the 53rd year of the Showa imperial reign - May 70 - the first wapisuri was brought out by Toshiba. The AW-10 was considered a wonder for its time. Large and clunky, with little flexibility, it was a bargain at just 60,000 yen (US $1,920.58). Since Toshiba's starting point, the race for first place in the Japanese wordprocessor market has been frantic. Between 1981 and the end of 1987, annual unit sales rocketed from 24,000 to 2.4 million.

FEWER KEystROKES

The standard wapisuri allows you to type in your text, either directly in hiragana, or in Romaji which is then automatically converted into hira-
gana. Then you press a button, and, where appropriate, the hiragana is con-
vverted into kanji. The most advanced wapisuri also offer context-sensitive automatic kanji conversion. The problem of homo-
yms is drastically reduced by typing in whole words or phrases. In the "in-
teresting" example, although both kanji characters in the word have several different readings, there is only one combination of characters that fits withRomaji.

The wapisuri also recognizes verb and adjectival endings. So in the case of "interesting," the wapisuri not only knows that san and shii should be in kanji. It also knows it must keep the adjectival ending (in hiragana). In the context of the word, it converts the stem into kanji, while leaving the inflection in hiragana. If the proper character isn't displayed by the time you press the kanji conversion key, you can press it again until the proper character appears. For the discerning sleuth, a graphic tablet lets you inspect or create any of the 40,000-odd Chinese characters, theoretically a fair game for Japanese though not found in the standard post-1945 Japanese set.

Since each hiragana character represents a syllable, typing it is made easier by substituting it for the Roman alphabet. To return to our "interesting" example, on a wapisuri, one might type: o + m + o + sh + i + r + i, plus the kanji conversion key. Contrast this with the eleven keystrokes required to type its English equivalent.

TODAY'S MARKET

With the advances the wapisuri offers other than typing, on a manual machine and writing by hand, no wonder the Japanese hand-helds to like samurai to sushi! The major obstacle was overcoming kanji.
Creating a dedicated Japanese word processor - wapuro - was no easy task. 128 ASCII characters slots divided by 2,000 just won't go, no matter how bad your math is.

TRANSATLANTIC TELECOM"Kosaka Yamauchi, a translator in Japanese from English, Norwegian, Swedish, and Dutch, has been using a Canon wapuro for the past five years. Describing the wapuro's invention, Yamauchi comments, “I’ve written practically no one without a word processor. Today, one would be hard-pressed to find a translation agency that still accepts handwritten work.”

In an area like translation, where a large number of revisions is often required, the ease and efficiency of word processing means hundreds of hours of work every day. Speed and clarity are both increased exponentially.

Japan may have gotten a late start with electronic words, but in a short time, they have out-competed much of the Western counterparts.

Japanese word processors often take advantage of the electronic medium. Using a word processor, I can consult with other translators and clients as well as send and receive messages.

Not just translation, but everyone from secretaries to managers are taking advantage of the new wave for words. In addition to me speed advantage top specific Japanese processing features that are now available in the West, are just beginning to be offered in Japan. Personalized fonts and cut-and-paste are the best thing since Tropicon on the Japanese market. A Japanese secretary boasted exactly what I described the electronic marvel. “It’s so much faster. Features like centering and underlining are great timesavers. For the Japanese, handwriting is still considered a sign of character. With a wapuro, one can vividly hide behind the anonymity of 2,424 characters. As an office worker comments, “We produce a lot more letters now.”

“WHO’S CHANGING WHAT?” What’s happening in a Japanese word processing world? It’s a question many Japanese and Western companies are asking. It’s a question the wapuro is helping to answer.

“WHO’S CHANGING WHAT?” or “WHAT’S CHANGING WHO?”

It’s clear that word processing is having a profound effect on the way the Japanese word processing world is operating. Asians, as always, are responding to the challenge of improvement faster than the Western world.

The latest development in Japanese character

Canon Inc. 4-37 Shintomuro, 3-chome, Oka-ku, Tokyo 120, JAPAN

Fujitsu America, Inc., 3035 Orchard Drive, San Jose, CA 95117 USA.

NEC Corporation, 3-chome, Shinjuku, Minato-ku, Tokyo 160, JAPAN

Sharp Corp., Word Processor Division, 23-22, Akasaka, Minato-ku, Tokyo 107, JAPAN.

Toshiba Corporation, Word Processor Division, Toshiba Building, Minato-ku, Shinbashi 1-1-7, Tokyo, JAPAN.
Mr. De Benedetti, here’s tech

These days, the Italians enjoy a reputation for excellence in technocultural performance: fashionable design styles, award winning film productions, new entrepreneurial elan...
The latter has given them a lead in the European office computer market.

Fortunately, the strategies of Milanese business peers as well as the architecture of Italian-made computer systems are directed towards openness.
Openness to foreign ventures and new markets, to working together with companies or systems abroad.

There’s just one flaw in this trend-setting connectivity: language.
Unlike other EEC languages, Italian is not a world language – and the Italians aren’t polyglots either.

In the post-industrial information society, this could become quite a handicap for a country now rated as the world’s fourth capitalist economy.

The system depicted above is the high-tech solution for language versatility.

Open language architecture,
high tech from the Low Countries.

It's a computerized communications network, in which written texts will pass linguistic hurdles easily.
This system is called DLT (Distributed Language Translation), and it’s designed for fast operation on the personal computer hardware of the 1990s — unassisted by human translators or bilinguals.

A prototype is under development at BSO/Research Labs in the Netherlands, a country near the cross-roads of the major EEC languages, and with a reputation for multilingualism.

The DLT project is a costly and long-term venture: no release can be expected on the market before the mid-1990s. But then, DLT represents a quantum leap over current machine translation software:

First of all there is the fully interlingual architecture, the most ambitious in the field, where stream-lined Esperanto plays the role of the invisible intermediary.

At the same time, this architecture harbours distributed Artificial Intelligence with an unlimited expansion capability, supporting high-quality translation of a diversity of technical and business texts.

And what’s more, construction of the DLT system is managed as an industrial process, not as an exercise in model-theoretic linguistics. Despite its pioneering character, BSO has succeeded in keeping this project on schedule and within budget — ever since 1984.

As an entrepreneur with broad vision, join us on the DLT programme. Help us build this bridge across the world of languages.

And bring your company right to the top of language technology — you’ll find yourself in the centre of Europe!

The DLT project is supported by the Ministry of Economic Affairs of the Netherlands. BSO is a private company and a leading Dutch software house. DLT investments to date exceed 2 million ECU.

Distributed Language Translation — a multilingual system for computer networks.

BSO/Research Laboratories
P.O. Box 5348 NL 3503 HH Utrecht The Netherlands
Tel.: 31 30 919111 Telex: 40942 Network: gemadflt uucp
Fax.: 31 30 944048
The classic enthusiast's approach to CALL is to point to the undeniable advantages digital technology offers over traditional supplementary learning aids such as the workbook and audio language labs. The computer is interactive. The student responds to it and gets immediate feedback—either positive reinforcement for a correct response, or notification of a mistake. The computer is capable of error analysis and identification and explanation of the source of error, which in turn allows for self-correction. And of course, the computer is inherently patient with the student, who may go over material as much as it (he) needs to—in privacy, without the stigma of being singled out as the class dunce.

This somewhat positivist image of the computer as a benign stimulus-response device is a legacy of the limitations of microcomputer technology in the early 1980s. Since then, technological changes in both the hardware and software fields have altered the picture radically. Interactive (or computer-accessed) video, for instance, can create a lifetime environment in which the student can both understand and use language. Hypermedia authoring systems designed for the easy integration of text, graphics, audio, and video, allow program designers to create rich, multi-layered language teaching systems that would have been impossible with the standard microcomputer approach. And research in the branch of artificial intelligence known as natural language processing (programming computers to "understand" human language) has led to experimentation in the use of intelligent parsing programs as part of CALL systems.

PROBLEMS AND CONTROVERSY
Behind this typology of language learning programs lies a continuing controversy concerning the appropriate way to use computers for language practice—"if at all. From the outset, endeavors in CALL have been characterized by an unusual level of self-criticism in the profession.

Part of the problem has been an understandable lack of standards or guidelines to give direction to program developers. Moreover, software has
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often been written by language teachers who lack a "wideshot" view of the potential of the com-
puter, or by computer scientists or programmers who are either naive about the proper form of a
language exercise. The result is many cases of programs that either make trivial use of the computer
or accomplish by identifiable instru-
tional purpose.

A key issue revolves around the notion of con-
text in language use. Language learning theory
shies the importance of pragmatic elements in a meaningful, global context rather than an unconnected string of words or lists of sentences. However, it has proved difficult to pro-
gram language exercises in anything like a mean-
ingful context. The result is often a sort of regres-
sion to the drill-based practices of an earlier era.

To come in the profession, the whole has been
enough to turn them away from CALL. Others feel
that the role of the computer is primarily to serve as a source of form—controlled, as opposed to mean-
centred—practice for those who need it. An British program developer Graham Blevins puts it this:
"The computer can be like a teaching device of much of the drill-
ery and remove them to concentrate on communi-
table skills." This view has set out to devise ways
to make CALL activities more meaningful.

EXPERIMENTS IN MEANINGFUL CALL

There have been several approaches to bringing
meaning into CALL activities, from the trivial, such as
requiring students to choose the appropriate
word to fill in the context before conjugating a
verb, to the complicated—using syntactic and
semantic parsing routines to allow students to
answer questions freely. In between, we have seen
some highly original, if not necessarily fruitful,
endeavors.

In both the U.S. and the U.K., for example, researchers have experimented with using program-
s based on the famous Rossetta program, designed by
some twenty years ago as a simulation of the role of a
psychiatrist in a consultation. Since Ellis uses a
patient-matching strategy rather than true parsing,
there are many utterances it cannot recognize,
forcing it to hedge, with its now famous "Please go
on" and "In what way?". When used for language
practice, the strategy caused yet another contro-
versy: it appropriated for a program to understand
the student and recognize the student's errors only
nearly ninety percent of the time at best.

One response to this problem has been to create
programs that are in a very limited domain, requiring
minimal lexical vocabulary and
structures, thus enabling the computer to recognize
with confidence a much higher percentage of stu-
dent input. Much of John Higgins' work at the British
Council has been of this sort, in addition to a certain
amount of work in the U.S.

One such project that this author has worked on is a set of Spanish problem-solving games known as
Juego de Comunicaciones. The concept behind the
program is to have students use Spanish sentences
for more than certain tasks, to paraphrase their input
and determine both its grammaticality and appro-
priateness to the environment.

The program consists of two fairly separate components: a language-independent parsing pro-
gram, and a set of language-specific data files in
which word classes, morphological rules, syntactic
patterns, and thematic-semantic attributes are specified for the benefit of the parser. The program's ability to
parse intelligently depends on an environment lim-
lited to that of the microworld displayed on the
screen, plus certain rules regarding the range of
permissible structures.

A typical activity in the game Los cinco diferencia-
ces. Two pictures are displayed side by side on the
screen, identical except for a unique identifiable
difference: door on the house/door on the house,
big cat little cat, dog/frog, dog. The student is
instructed to describe the five objects that are
different in the right-hand picture by using the verbs
ver (to be), tener (to have), or nowhere in (e., etc.).

With each input sentence, the program parses from
left to right to see if it can recognize a pattern.
If it can, the parser then checks the elements in that
pattern for problems of gender number agreement,
missing words, etc. If problems are detected, the
questioned words are highlighted and a cancel
message displayed to give the student a hint as to
the nature of the problem (masculeno feminino, etc.
If no syntactic problems are found, the program
checks the lexical content of the input sentence to
detect differences with the semantic attributes for that
particular picture. If semantic anomalies are de-
tected, messages are again displayed. The follow-
ing is an English translation of the Spanish dialogues
that might accompany one of the pictures. Numbers
are for reference, computer feedback in italics.
1. The situations are bigger (maior grande, singular)
2. Simpler or plural?
3. The situations are bigger (maior grandoo, plural)
4. You're right.
5. There is a window
6. How's that? ...
7. There is a window on house
8. The article is missing.
9. There is a window on the house

10. Yes, but that's not a difference.
11. There are two dogs near the house.
12. I only see one.
14. You're right.

The program is of course not proposed to give an intel-
gent response to every possi-
bile student sentence, even in this limited microworld.
When faced with totally un-
expected, yet plausible, non-
soze such as: Hey una casa
ahí fue tu familia? ("There is a house in that mail") the
best the program can offer is a (Good), which the
user takes to mean roughly "That's a good Spanish, but I don't get it." And the Spanish structure in line
12, Hey una ventana en casa, is technically correct—
and another, irrelevant, sense—but the program does
not know that either.

All the same, there is much the program does know, as already clear from this example of the responses
above. The point is that given a limited domain such as this, and with certain structural restrictions, it is
possible to design a program that demonstrates a
certain intelligence of most of the time. And given
that the aim of such a program is to provide a means for
students to explore how sentences are built in
Spanish, rather than to teach them to a rigorous test of
their own grammatical knowledge, that "rest of
the time" may well be sufficient.

WILL WE HAVE INTERACTED OR WE'VE HAD ONE OF THESE AT
SCHOOL?

It is unrealistic to predict the future, especially in a
field as this rapidly as the one. Nevertheless, a
significant new beginnings are occurring to take
shapes that are existing CALL to take on a new
look and acquire a new mission by means of the
hypermmedia systems, interactive video, intelligent
information systems, and the use of digitized audio.
As with the rest of the densely interconnected world of
electronics, none of these new technolo-
iges is entirely or exclusively digital. Rather, in
the future they may not be separate technologies at all, but
more components of what may prove to be the
intelligent language learning system of tomorrow.

HYPERMEDIA SYSTEMS AND INTERACTIVE VIDEO

The notion of hypermedia comes from the earlier
concept of hypertext: text on the screen that can
theorize how open up you zoom in to reveal fuller
information about the words or the topic. Hyperme-
dia includes access to other media: audio, video,
graphics, and animation. Clicking on a certain
text may result in an animation, a different
color, or another window. The pronouncement of
a word is a graph-
ics picture, a full color video with figures, or a seg-
ment of full-motion video.

The notion of hypermedia authoring
systems in the market that enable instructors
to create such programs with relative ease. The most
important features of such systems, however, may
well be the way in which they facilitate the produc-
tion of full-motion video.

Interactive video normally uses a videofeed
player, since it can provide almost instantly random
access to any of the approximately 60,000 images on
the disk. What distinguishes interactive video
WE POSITIVELY REINFORCE

An overview of CALL techniques
Most current CALL applications fall into one or more of the following categories: drill-and-practice programs, tutorials, simulations, games, and tool programs.

DRILL-AND-PRACTICE
Drill-and-practice consists of the mechanical manipulation of words or sentences, using exercises similar to those used in class or the language lab: analogy drills (stimulus: I'm going to the swimming pool. And John? response: John is going to the swimming pool; mutation drills (changing statements to questions, affirmative verbs to negative ones, the present tense to the future, I fall ill, etc). The pedagogical value of such programs depends largely on the quality of the error analysis they use, if any. Early programs often responded with little more than "Sorry, try again." A typical drill-and-practice exercise might look like this:

Instruction Answer the questions with pronoun, as in the model.
Model She is a feminine pronoun. He is a masculine pronoun.
Exercise 1. a. She was born in Paris. b. He was born in Paris.
Correction: a. She was born in Paris. b. She was born in Paris.

SHE is a feminine pronoun, but can you say "it was for SHE"?

OK. Complete this sentence about Mary. The call was for ...

Good. Now try this exercise ... (as above)

The appearance of intelligent interchanging is usually just that - mere appearance. The program matches for certain key words in the student input and would be incapable of making sense of much else. The computer's chaty responses, on the other hand, are canned phrases stored for the appropriate occasion.

SIMULATIONS
Just as air pilots learn to fly in computer-controlled flight simulators requiring them to use real piloting skills, the language student can participate in a make-believe world in which he must use the target language to get by. At the simplest level, this microworld exists only in text on the screen. More elaborate versions use graphics or even video to simulate their special reality.

One of the most elaborate simulation projects is Montevideo, an experimental video disk simulation for Spanish developed at Brigham Young University. Specially shot footage of a Mexican village allows the student to use the computer to explore the town, choose to go one way or another, and "talk" to the natives - listen as they turn to speak to the camera, then choose from a list of responses. The student immersed in a simulation of this sort is understanding and using language in a meaningful context rather than focusing on the form of the words.

GAMES
Closely related to simulations are the many game programs that require students to use the foreign language to achieve a certain goal: unraveling a mystery, completing an imaginary trip without spending all their "money," or problem-solving. For example, "Tell me how to get from the station to the hotel." or "How is this picture different from that picture?"

One foreign-language game displays pictures on the screen of various rooms in a mysterious house and challenges the student to solve the mystery. To open doors, move from room to room, or pick up objects, the player must give coherent instructions in French. Unfortunately, the program's own French is extremely limited, and sometimes embarrassingly wrong.

TOOL PROGRAMS
The term "tool" here refers to software designed for language-related purposes other than CALL - word-processing and computer-aided writing programs such as spelling and style checkers, etc. - which can nevertheless be useful to the language student. Word-processors, especially those that include a foreign-language dictionary, can clearly do much to help students refine their writing skills, spelling, punctuation, and so forth.

Similarly, a database program could be used as a reference tool, perhaps as a source of information about grammatical forms. Several U.S. colleges have begun using their campus computer-assistance to have students practice writing and "mailing" short compositions to each other and to their instructor. The medium of electronic mail seems to encourage students to write more freely and to use a wider range of language functions such as requests, complaints, and confirmations in their message.
from simple linear (VCR) video is the wealth of access it provides into the material. The student uses the computer to control the flow of images; to back up, repeat, or jump ahead; to ask for subtitles or key words to appear on the screen, to call up help screens, comprehension questions, or translations. Some foreign language video programs offer the option of a second audio track containing a more carefully pronounced and mistake-free version of the dialogue.

With hypertext media systems, this type of interaction may be combined with overlaid or separate graphic images, so that the student can invoke a particular segment of video, or a graphic, by clicking on the corresponding visual symbol or icon. Or a particular line of dialogue can be played and replayed with nothing more than a click on that line or a click on the screen. In this way, the student concentrates on understanding the story and the language, with little or no concern for the mechanics of access.

ARTIFICIAL INTELLIGENCE: MICROWORLDS

Artificial intelligence (AI) is that area of computer science in which machines are programmed to simulate behavior normally considered to require intelligence. Human language is but one such area of behavior. To create a system which can recognize and understand, even partially, memoryless layers of language structures—scramble, words, sentence, structure, semantics, etc.—requires extremely complex programming.

For this reason, many researchers are experimenting with natural language programs that focus on a restricted set of language rules in the "limited domain" discussed above. One of the most elaborate experiments in the use of AI for 2+1-LAN is currently under development at the Massachusetts Institute of Technology, known as Project Athena. The MIT understanding is intended to provide a model of the best that can be achieved in AI, through the use of the best technological resources available.

One of the MIT system's components, Lipog, combines a sophisticated parsing system with an elaborate micro可以获得portrayed on a color monitor. The prototype features a German conversation between a native speaker and a piocherger, adept at mess up the room visualized on the screen. A sample dialogue, in English translation, looks like this. Computer output in boxlets:

What should I do?

You should tell me where the glass is.

The glass is on the table.

Try laying it inside the fridge, please.

Very good. I have laid the glass in the refrigerator. Now, what should I do?

Tell me where the book is.

I don't know which book you are talking about.

The red book.

The book is lying on the bed.

OK, put it upside down under the bed. . .

With each interaction the student gives, the graphics system rearranges the images on the screen to correspond. The student's attention is focused on the images and how language affects them, making the dialogue an authentic goal-oriented responsibility.

The artificial intelligence system underlying Lipog is being designed to be both generative and modular, so that it can be used either on a whole or in parts to support a variety of applications. The basic language-processing procedures—morphological, logical recognizer/generator, parser, case frame interpreter—are language-independent.

Other modules contain language-specific rules regarding the lexicon, morphology, and syntactic patterns of the language being dealt with in any project. Russian, Spanish, French, German, and English as a Second Language (SSL) other components, such as those pertaining to knowledge representation— the way the system is made to understand the "world" around it— are relatively independent of any linguistic information.

DIGITIZED SPEECH

A feature regularly lacking from dialogue programs is the capacity for either the student or the computer to use speech instead of typing. The ability of AI systems to understand spoken language is still quite primitive. But even if the student cannot yet speak and be understood, the system itself can be programmed to "talk" on cue.

There are two basic approaches to computer-talk: digitized speech and synthesized speech. Digitized speech is high-quality "comes" audio, produced by converting real speech into digital code and then back into analog wave patterns for output. Synthesized speech begins with the code itself, generated by a computer program using a plasticizing, mimetic, voiceless code it is then processed in the same way as the code for digitized speech. The advantage of synthesized speech is that it does not require the elaborate set of network internalization patterns that is necessary for digitization and allows the device to generate on demand whatever utterance might happen to be needed. The disadvantage is that it is not usually provided a sufficient and accurate model for a student trying to master speech and language— especially interaction patterns.

Digitized audio can be stored in the same form as computer data, on the computer disk drive, on a CD audio player, or even on a mass-storage CD-ROM player. Whatever the storage device, a segment of audio data can be accessed instantly, decoded, and played back whenever needed. Though these segments are necessarily "earned" the amount of memory storage on today's handheld storage systems in the new CD-ROM allows for the storing of a virtual library of words, phrases, and sentences.

In a hypertext media system, for example, these pre-recorded segments could be used to provide audio reinforcement, clicking on a word might it in a still video image accompanied by a segment of audio describing it. A grammar practice program could draw from a variety of possible phrases that could be used as feedback for the student's answer— one more way to simulate a more meaningful linguistic exchange.

NEW TOOLS

So many years old as a microcomputer application, CALL has already passed through a shaky adolescence into hasty maturity. Much of what was accomplished with computers in the early years amounted to little more than mashing at their immediate predecessor, the audio language lab. In its heyday, the lab had been designed to present the functions of the term, skill-based methods of the time, relatively the 50 cailed methodologies used. Until recently, developers faced with a new medium too met first to produce what is most familiar, most obvious, or easiest to do.

However, this attitude has now given way to the realization that computer and computer-related media are radically different from anything we have used before, and that these differences require a new way of thinking about the relationship between student and means of delivery. The instant-access environment created by a hypertext system, for example, cannot be reproduced in any other medium.

How can that environment be exploited? How much control should the student have? And how can the content be placed in the hands of the learner? Is there any way to do this on a large scale? How can the content be placed on a large scale? How can the content be placed on a large scale?
EXPOSICIÓN DE ENSEÑANZA DE IDIOMAS MODERNOS
Barcelona del 7 al 9 de Octubre de 1988
Palacio Ferial (Feria de Barcelona)

ORGANIZACIÓN KEITH HARPER, S.A.
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15 WAYS TO GET THE MOST OUT OF

VENTURA PUBLISHER

Illustration: Max Kamen

California-based word-crunching expert Matthew Holtz tells us how to work with it more productively, the second in our continuing series on how to use popular wordcrunching tools more effectively.

By Matthew Holtz

1. When loading text/picture files into a Ventura chapter, you can load several files of the same type in succession. Use the Files menu's Load Text/Picture dialog box and click Several for .OFF files. As you load, Ventura will repeatedly display the Item Selector box, so you can easily load successive files. When you're done, click the Cancel button.

2. You can add several frames in Ventura in succession. Once you click the Add New Frame button in the Frame mode, hold down the Shift key as you add successive frames. The Add New Frame button...
will remain selected, allowing you to draw names immediately. Release the Shift key before you add the last name. Remember, too, that in the Frame mode, position Ctrl+2 is the same as clicking Add New Frame.

3 You can format all chosen paragraphs on a page with the same paragraph settings. To do this, select multiple paragraphs. You can do this by holding down the Shift key as you click the paragraphs in succession. With the paragraphs selected, click the proper tag name in the Assignment list to assign that tag's attributes to the selected paragraphs. To deselect one paragraph, click it again. To deselect all the paragraphs, simply click some other paragraph without the Shift key, or key down/ overlap modes. You can even select multiple paragraphs to assign tags. You can use this to simulate the change the attributes of paragraphs formatted with a variety of tags.

4 You can select multiple frames or graphics to cut, copy, paste, or resize them as a group. Shift-click the frames or graphics in succession to make a multiple selection. You can then cut or copy all the frames on one page to paste them on another, or replicate all the frames on the same page while keeping them equidistant to one another. Changing the size of one changes the size of all. And although you can change the attributes, such as frame background and border lines, to a selected group of frames, you can change attributes for graphics, such as line attributes and fill attributes. Once the multiple graphics are selected, just use the Graphic menu as you wish.

5 You can copy frames or graphics with similar characteristics, even in compound text objects. If you already have a frame made in a compound text object, it's usually helpful to copy rather than create each frame from scratch. For example, it's a good idea to copy fonts side by side for all the section titles and frame backgrounds, even if you intend to make them different sizes. Likewise, it's beneficial to copy frames that are to have the same size, even if you intend to provide them with other attributes as well. Use Shift to select multiple frames for the clipboard and the insert key to paste the frames in the same position on the same page or on a different page.

6 Hide pictures to speed screen processing. Use the Options command to do this. Group pictures, only when you truly need to work with them. When you are about to begin working with one picture, you may wish to temporarily move a neighbor- ing picture off the screen before clicking Show Pictures. That way, Ventura won't have to redraw the additional picture unnecessarily. Hide pictures as soon as you are finished working with them. Hide before sizing, hiding, setting options, and scrolling rather than after, as Ventura will redraw your pictures after each of these procedures.

7 Geometric text is different than Ventura to substitute plan, straight lines for text in Text-frame facing pages. You can write and use multiple variables by using the Options menu’s Set Preferences dialog box. The size available for Text to take is determined by the number of text boxes (pixels). If you choose a size, Ventura will grow all the text that size and smaller. (Great larger-size text to speed screen processing is this: You are growing all text sizes.) Geometric text is very useful for speeding screen redrawing, saving when the plug- gin performance of these views sometimes suffers.

8 To speed the loading of Ventura-related meta- data, keep the following directories containing Ventura metafiles low in alphabetical order. Doing so will minimize recording in their Assignment list, and you'll be able to select Ventura directories more quickly. You may wish to reverse the trick that Ventura uses to give your text priority in displaying the names of its generated tags (GEBOxxx) and so on by beginning your Ventura-related directories with A, as in A_SAMPLE.

9 Prestage tags and other attributes in wordprocessed files. Doing so means you don't have to tag those paragraphs in Ventura. Normally, Ventura assigns the Body Text tag to each paragraph. However, you can assign other tags or wordprocessor by typing it followed by the tag name, a space, =, and another space. Thus, to apply a tag called CHAPTER_HEAD, you'd enter: CHAPTER_ HEAD = at the beginning of each paragraph you want to assign that tag to. Use your wordprocessor's macro capability to apply this tag repeatedly.

10 If you're unsure of how to apply some effect with your wordprocessor, create the effect with some sample text in Ventura, and save the file in your wordprocessor's macro library. Then change your own wordprocessor, and use the sample as a guide for further sizing of the effect.

11 Create a template for documents that are repeatedly laid out in a similar fashion. Once you finish with the first version of a document, such as a monthly newsletter, use the Edit menu's Remove Text File procedure to remove the files that belong in the Assignment list. Keep these files that you plan to use in the next issue, such as the masthead, obviously, you could instead nest such material as Frame Text, by placing the masthead, for instance, within a frame without assigning it to a file.

12 Save the resulting empty, template-like file or head or nest as a model document. Then load it with a name designating month, name, month. Then load it with that name's files, and otherwise do as necessary.

13 Use the Page menu’s Go To Page command to flip to a selected frame's text file, or to define a frame's text file from page to page. In the resulting display box, the Line button should be selected (deselect it). Click the Next button and the DK. Ventura will display the next frame that the selected frame's text file contains in, even when the next frame is on a far-flaring page.

14 To format quickly, standardize the tag names in all your stylesheet. For instance, if you are doing Holdin for major headings in your style sheets, use the same tag name for major headings in all of your text. With this simple rule, you'll quickly apply any style sheet you want to. New attributes will be automatically applied to all appropriate tagged paragraphs. Without similar tag names, Ventura will not apply the new tag’s format automatically.

15 To change all similarly tagged paragraphs to a different tag, remove the tag they are as- signed to. When switching style sheets as just described, if your names do not agree, many people think they must retag the paragraphs one by one. Instead, simply remove the tag name carried over from the old style sheet. Use the Paragraph menu’s Remove Tag command to do this. When you do, the following box will allow you to specify a tag name to convert to. Specify the appropriate tag name as it appears in the newly assigned style sheet, Ventura will convert the paragraphs and apply all formats automati- cally.

16 Assign and use the function keys for tag- ging. When you use the function keys, you don’t even have to switch to Paragraph mode as you usually would to apply tags. This applies to all tags you apply to text in the Text mode. Here, too, it’s a good idea to standards. As much as possible, the same function key should be used for the same tag. This means that if you have assigned to the likely fact, following Ventura’s convention, Fr.1, 2, and Fr.3 should be used for Heading1, 2, and 3, respectively. If you forget which tags are assigned to the keys, the quickest way is to check in Type Ctrl+K to see the as- sumptions, then enter the Enter key to go back to work on the document.
INK TextTools

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An example of Notahene's multiscrypt capabilities. Text is the first verse of Genesis.

by Dr. Harry Goford

Unusually, my initiation into computers, came via Old Church Slavonic. As a biblical scholar editing medieval Eastern Orthodox manuscripts in both the Glagolitic and Cyrillic alphabets, I began looking for ways to work on research papers for publication.

At first I used a simple but powerful editor on the university mainframe — sadly now, since my dissertation text had to be typed in a transcription impossible to read above the scree, while multi-scrypt wordprocessors came out, I was still using paper and pencil. The three multiscrypt programs I've tried at length are the Notahene Special Language Supplemets from Dragondale, Harmsworth Corp.'s Multilingual Software free Gamma Productions. None of them seriously disappoint, in that they all do what they're basically supposed to, that is allow me to prepare work for publication and see my Cyrillic or Slavonic written versions and proofread before it's typeset.

Of the three, however, Notahene stands out — both in price and quality. Of course, it must be stated that a multiscrypt program is neither unfair, in that Notahene is both grander in design and far more expensive than the other two. In fact, for USB disk, it gives you a comprehensive scholar's working environment, including not just wordprocessing but database management too.

Notahene's basic wordprocessing program includes all English, French, and German characters. The Special Language Supplement, which comes in a separate version, requires varying amounts of additional hardware: an EGA card (or VGA working in HGA mode) or a Hercules Graphics Plus card (or Eversense compatible Eversense Display). Painters currently supported are the Artist FX-63, Toshiba, and Hewlett-Packard laserjets.

Notahene's new versions are Biblical Studies, which adds vocalized Hebrew and classical Greek; Classical; Classical; Classical; Classical, which adds Greek and traditional; Latin; Latin; Latin; Latin; Latin, and with the modern Skype language in Cyrillic. However, all the characters you need are available. If they aren't, then they're on the way in. An excellent feature is that it includes open-source fonts, but what I need is the capability to generate new one for printing. Notahene is considering this possibility (continued next page).

The much vaunted FullWrite Word-IMOS version for the Mac, has finally arrived. FullWrite's notorious pedantry has been thoroughly discussed elsewhere. Suffice to say that Adobe Text, a relatively new wordprocessor to the Macintosh software market, has now become a bigger player.

Once I cleared a few bugs on my hardisk and started up FullWrite, the first thing that greeted me was an update to version 2.4. Not enough memory to complete this review? Well, FullWrite is designed to handle any number of documents and any number of fonts. This is perhaps why so many have been using it. There are six wordprocessors in all, all displayed on screen, and six sets of fonts. The one font I do recommend is the printer's, so that you're actually seeing what you're printing — even on dot-matrix printers. Used it with a Toshiba FX5 and standard printer, now I'm trying a new one: a laser printer in its normal speed every time.

Notahene's file structure allows it to easily be translated for transmitting on machines using the Macintosh LaserWriter. In addition, other software can be run on them in order to produce corresponding text of other useful research tools.

My reservations about this program are minor but deserve mention. First, the fonts are expected. Not a hindrance if all the characters you need are available. If they aren't, then they're on the way in. Notahene's two positions will include open-source fonts, but what I need is the capability to generate new ones for printing. Notahene is considering this possibility (continued next page).
If you use a P.C. based wordprocessor to do technical translation, you'll know there are two routes to building your own online bilingual glossary. You can either add the terms you need to one of the few online versions of original books, such as Linguatext's Collins English-French Dictionary. Or you can invest in a CD-ROM drive, with one capacity to soak up every dictionary is the Tower of Babel commercial library but no useful application for assimilating all those words.

Ink International aims to fill this gap with Term-Tracer, which it sells as a productivity tool and glossary-handling program for IBM XT/AT's and clones. Run from inside a wordprocessing program and compatible with most major packages, Term-Tracer enables busy translators to look up terms, paste the translations straight into their text, add terms to their own database, cross-dictionaries from scratch, and quickly access any dictionary in any directory on the current drive.

The advantages are obvious. All those bulky dictionaries can now be pared down to what's useful, and, along with illegible company glossaries, can be input into any number of separate T-7 databases. There they can be cross-referenced without the translator's attention being switched from the manuscript. Generating separate dictionaries for separate jobs, whether by field, text type, or client, will ensure consistency of usage throughout a given document. In a nutshell, Term-Tracer makes looking up words and managing their usage a quicker, cleaner, business.

The package includes a clutch of English-French/Dutch/Spanish/German word dictionaries for the dataprocessing and general business fields, amounting to a total of some 700 terms—a bare minimum to get you started. You access these terms from the main menu, which you call up when you come across an unknown word in your source text.

Another feature—Eickey—allows you to handle nonstandard characters for entering exotic brand names or math symbols in your source lists. It also offers a set of macros, which can hold only 45 characters—just enough for a swanky back name—and speed up repetitive phrases. But watch out: they don't get confused with macros defined inside your own word program for the same key combinations.

The program is menu-driven and seems designed to use a minimum of keystrokes to move around the options. Handling T-7 is, in fact, authentically straightforward, with easily accessed Help screens and handy configurations to slip straight into the different options and cleanly designated menus. Everything in Term-Tracer seems made to help you get on with the task hand, rather than sit and agonize over the complexities of the title.

The accompanying documentation is also a model of efficiency and clarity, though, since the package must be initially designed for users working towards their own English-foreign, foreign language versions would have been a good idea.

I particularly liked the accompanying Utilities pack, offering programs that do handy things to your dictionaries; merge two together; switch lookup directories (yes English to French then back to English) and convert the dictionaries you hold into ASCII for a print out, into T-7 format to let you access them through the Lookup utility—thus allowing wide-ranging comparative word searches.

The mechanical effect of such tools should be to get translators away from their rigid paper-based approach and back into a feasible use, which becomes a hypertext version of what glossary management is all about. —Andrew Josceline

INK International, P.O. Hendorstom, 86, 12176 BE Amsterdam, Netherlands- Tel: +31 (020) 64 68 61

**FULLWRITE (CONT.)**

"Insert it in various places you can later update the document..." That's the main reason why I would be reluctant to advise any beginners who might want these facilities to use this program.

Dr. Mary Gaylord teaches computer technology and humanities students at the University of Grenoble, The Netherlands.

**MULTISCRIP (CONT.)**

Second, there are minor problems in getting these two pages to print. Of the three Hebrew words glossed in the glosses on the back of the book, the only one of the two Hebrew words glossed does not conform to normal practice. Dragonfly also prom-

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OPEN YOUR
TO INFORMATION
MANAGEMENT

Cheryl Szymkowiak is a harassed executive. "Red," she addresses her newly-hired office help Rod Eklezinski sternly. "Do something about that mess in the laser fax machine. I want to know what's going on about the problem visit of Ransbury-Kato, president of the Canon Corporation, to the USA this fall."

Red glances furtively at the clock, nervously remembering his dinner date this evening, and replies, "Yes ma'am, I can get you all the information you want about his visit, ma'am, as soon as I get organized."

Rod smiles a secret smile. He's been gliding through the manual for Persands' Isaac information management software all week, and he's already been bitten by the laser bug. Not so much by the program itself, but by how many words he can think of that end in IS... Eventually, he finds the information, but it takes him so long that he'll be late for his date and will have to apologetically tell his Platzow friend Vanda.

In fact, Red could have saved himself a fraction of the time it took him to use his laser to get it - if only he'd used a simpler search program. To begin with, Lex uses keyword searches, which means that untagged keywords cannot be searched for. Incidentally, Flinders, for example, assumes that every word is a keyword.

Lex is an epitaphian tool for searching a library's catalog - strictly for heavy duty use. One of the most powerful features in its ability to produce an index view, which lists every entry in which your chosen keyword appears. The outline always fits the screen, and it provides links to a text or another outline, which allows you, if necessary, to continue your search.

In short, Red's decision for the most popular wordprocessors, as well as for some wordprocessors with limited capabilities, but adequate for producing straightforward notes or business correspondence.

However, the program only supports a limited number of printers, and does not fully support laser printer proportional-width fonts. Although text can be printed in these fonts, Lex can only justify both margins of text printed in fixed-width fonts.

Lex is only worth its US$445 price if you really need its comprehensive facilities. It takes a long time to learn, despite its excellent tutorial, and occupies more than 1.5 MB of disk space and 61 K RAM - well within the limits the minimum available in the average XT/AT compatible.

P.S., like Flinders and FilePrint, it's musable with compressed files. - M.M. Ratnagar

Persand, Inc., 405 Science Drive, Madison, WI 53727, U.S.A. Tel: (608) 273-6000

MOUSE AS DOG

MouseMenu is a terminate-and-stay program enabling you to use a mouse with WordPerfect. While its intentions are admirable, its implementation leaves much to be desired.

To begin with, the mouse cursor and position cursor are one. Thus, any inadvertent movement of the mouse will send the cursor zooming around the screen, and with it, any text you happen to be entering. For some unexplained reason, a left click generates a hard return, while a right click causes a large menu to be displayed in the right of the screen.

Experienced WordPerfect users will be dismayed to discover that the layout of the menu does not correspond to the old familiar key pattern. Not only is the layout different, but the names of some of the functions are too, thus rendering a sizable amount of the existing WordPerfect documentation obsolete.

Fast typists will discover that reaching for the menu for simple commands is nothing but a hindrance, and they will want to continue using the function keys for most purposes.

In short, this program considerably reduces the usefulness of WordPerfect, and cannot be recommended. Price US$49.95.

Sally Brown

MouseMenu, Inc., P.O. Box 1020, Brookline, MA 02146, U.S.A. Tel: (617) 964-6067

MEGACHOMP RUSSIAN WP

Up to about two years ago, it was practically impossible to use a wordprocessor to handle non-Russian scripts. And anyone wanting to write documents containing different scripts - in my case Russian and Cyrillic - was driven to despair.

Then came the answer to our prayers: a whole clutch of both North American and European microcomputer wordprocessors, mostly from small software houses, on the whole quite cheap, and some a tad rough and ready.

The one I got my hands on was Dusklan 1.3, from Megas. This international bilingual wordprocessor is available in a score of language pairs, each of which combines English with one foreign script. Choices range from Russian, Greek, and Armenian to Hindi, Thai, and Laos. I tested English-Russian.

Dusklan lets you switch between English and Russian in the middle of your text by pressing a single key. Most of the program's editing functions can be activated with no more than two keystrokes. More complex features, such as reformating paragraphs and setting print options, are assisted through easy-to-use menus displayed at the bottom of the screen. And you can print a screen image fast - including enlarged characters, a surrounding frame, and a user-specified message above it. In fact, Dusklan's diversity of printing options is one of its most convincing features.

The program's really major fault is the poor quality of the Cyrillic characters. They seem to be designed for someone who has never actually seen a Russian text. Fortunately, however, Dusklan supplies a font editor, enabling users to design their own fonts. Which I did. And, using the program's keyboard layout editor, I also changed the alphabet to resemble that of the Cyrillic.

A minor drawback is that Dusklan lacks one or two features present in some other Russian wordprocessors, such as dictionary and automatic footnotes. But, then, this wordprocessor is aimed at users who want an easy-to-handle, straightforward tool to produce combined English-Russian texts and print them in a visually attractive way.

And when it can do this reasonably well at US$109, who's quibbling? - Peter Weiss

Megachomp Corp., 3524 W. Passyunk Ave., Philadelphia, PA 19148-1806, U.S.A. Tel: (215) 331-2780/8158

15 LANGUAGE TECHNOLOGY
HERE'S
LOOKING AT YOU,
BITSTREAM

STRANGER IN
YOUR OWN HOME

For old WP faithfuls, starting with WordPerfect 5.0 is like having your house done up; wiring fixed, plumbing renewed, wardrobe painted — the lot. You know it's your house. Yet there's much that's new, it feels like you're living with some indispensable neighbor. You feel rich.

No more sources and sniggers from PostScript printer evangelists. Bitstream's four-screen printer fonts and typographical Eighties. The Bitstream Library contains 160 odd typefaces that are easily installed as blocks for PostScript outline fonts. For that matter, I chose to cast a beady eye at Charter, a serif typeface designed by Matthew Carter (Bitstream's senior design VP), see LTRP for use on 300 dpi laser printers. I installed both display and printer versions in the sizes 6 through 12; 14, 18, 24, and 36 in Xerox Vortex Publisher. Count on spending a long, pleasant lunch while your computer is doing all the work.

The display fonts are a pleasure to behold — sizes 6 through 36 display very nicely on my Micro Display System with the Crystal Plus monitor. The taste of a typeface, however, is in the printing. Don't try to print nothing above 30 points as yet, because Ventru-a's Portal Eros will start flashing your screen.

What baffle me though is that at the same time the program from Charter's smiling face emerged from the printer. Headless I say. Humphrey Bogart would be proud of this feature-saying goodbye to legibility on the computer screen if he had seen the face Bitstream says it with.

A basic PostScript kit is available free on request with the purchase of Word 4.9 and the new WordPerfect 5.0. Otherwise prices are: PostPerfect 5.0: $395.00, Bitstream, Inc. (1986). This review is typeface in 9 pt. Bitstream Charter Roman. With Winter 1.1. IC

COMPUTER-AIDED-HEADLINES?

The Saltoon Corp. says Headliner is for "creating headlines, these lines, slogans and jingles with your personal computer." What makes a good headline? It should be "easy to remember, easy to read and simple to pronounce."

Creating them can be arduous, especially if you have big ambitions about plagiarism. But, says the manual, "There is a procedure proven to be highly effective. Simply find and modify some clever or already popular expressions." Even Shakespeare used to "borrow" good lines, so they say.

Headlines contains 33,000 expressions divided into several generic databases. There's one for common phrases ("If looks could kill ... "); one for proverbs ("Don't remove a fly from your friend's head with a hatchet — "); song titles ("Bill Bailey won't you please come home?"); movies ("Eight Million Ways To Die."); books ("Sea and Human Longing"); quotations ("Nothing depreciates a car faster than a neighbor looking at a new one."); and previously used promotional expressions for various types of product ("The beautiful way to express your face").

To generate your own expression, you start at Headliner's two-screen one for database selection (All, Songs, TV Shows, Advertising, Toys, Beverages, etc), and one for search mode selection. There are seven search modes: Review (displays all expressions), Whole Word (finds an exact match for a word), Embedded (searches for a string of characters), Similarity (looks for expressions that are somewhat similar to a line), Rhyming (searches expressions that end in a particular sound), Anonym (finds words that have matching beginning letters), and Profanity (checks on expressions for possible off-color, vulgar or obscene meanings).

For LP, I created a notion collection of headlines: "The I-street Twist, Lockheed Style, Language Technology." "Join us in a voyage to the bottom of the language industry." "Read all about the words and the ink." "It takes two letters to tangent...

And that's not all. What about "If you enter words, we've had enough of your mind."

"Follow that word." "We take the words right out of your mouth."

"Cause in the race against words the chase is on."

"We've got the write-how."

"Get your words worth!"

"We make words for people who make words."

"The last for words."

I read these to friends and colleagues, and I'm afraid their reactions wouldn't make it through the probity check — Peter Mitten

Salton Corp., Box 31847, Dallas, TX 75231, U.S.A. Tel: (214) 693 9091
JAPAN: TAKING OVER

"The Fifth Generation Falling," by Marshall Unger

by Alex Grow

Submitted "Why Japan Is Betting Its Future On Artificial Intelligence," this book advances two major arguments about the gap between language and reality. Unger first argues that modern judgments about artificial intelligence are based on poor knowledge of Japan. He cites the chief visionaries here as Edward Feigenbaum and Pamela McCorduck, authors of the 1983 book "The Fifth Generation" and critics of the advances of artificial intelligence in its most extreme and allegedly cross-grain form. Through efforts such as theirs, Unger believes, the West has been persuaded that the Japanese seek new and advanced computers in order to surpass western technology once and for all.

Unger's thesis is that the Japanese drive for supercomputers is in fact motivated by very different goals. Their main concern, he contends, is to find a way of manipulating what he sees as their unwieldy native language. And herein lies Unger's second great gap between language and reality: the inability of the Japanese to recognize the inadequacy of their language, a blindness which has prompted a vain--in both senses of the word--attempt to find a way of perpetuating their writing system. To achieve this, they have elevated themselves to the status of godfathers of a supranational scientific effort. And it is this blindness that explains the many postulated the Fifth Generation (CVIP) project has suffered since inception.

This is tedious stuff, and it is an admission to be partially or even largely mistaken to an extent on new and fraught with sophisticated cross-cuttings of disciplines. Indeed, Unger's book encompasses far more than merely the problems of Japanese typewriting. His facile understanding of AI's highly specialized concepts and processes is truly impressive. And he presents a wealth of detail about Japanese input keyboards and computer conversion that will surely serve as a resource for others. His reverie of philosopher John Searle's distinction between "weak AI" that computers can be useful in modelling and testing how the brain works and applying this knowledge in limited expert system instances and "strong AI" (roughly, that computer programs and the human brain are ultimately analogous and even indistinguishable) is a sea

Of course, there are those who argue that computer science will find a way of totally bypassing language. If they are correct, then all imports of machine translation may suddenly become ridiculesly easy. Translators and interpreters will go the way of village scribes, water bearers, and footmen. The new goals of language and treatment will be computer scientists. On the other hand, if they are mistaken, we can expect these newcomers to creep off into a corner and commit electronic sepulchres. More probably, the battle between "strong" and "weak AI" will simmer down into an uneasy truce. A trend in this direction can already be seen in the translation market, with computerists performing massive and tedious tasks, while "human translators" are still indispensable whenever finesse or overview are called for.

I do not agree with Unger that the Japanese might be better off forgetting their language with a Latin alphabet. He quotes Kenneth Pachl, Japan's foremost AI expert, to support this view. But Pachl's words could also be interpreted as supporting the
HARD COPY REVIEW


Andrew Jessop
The late Margaret MacDonald, founder of the Cambridge Language Research Group, is a man most people involved in the language industries will have heard of. Notwithstanding, the proceedings of the Ninth ASLIB Conference on Information Retrieval are dedicated to her memory, with an introduction and two papers evoking her apparently formidable personality and profound ideas about matters linguistic and intellectual, and more intriguingly about how written language reflects "language groups." The other contributions have a gap at catching the 50s question of how knowledge bases or their accompanying retrieval systems can become intelligent - handling not just formal but equally casual knowledge. The range of specificity and style is fairly wide: from McArthur, editor of English Today, giving us an engaging day-dream-like description of the modes of representing, mapping, and circulating knowledge, to a fairly technical report on an architecture for advanced information retrieval. In fact in the latter we are treated to one of John Backus' detailed expositions on this topic. The question of summarisation for information retrieval, as well as a long, complete, paper on the Illionsy - a tone of Semantic Web Engineering, a theory of meaning for modeling data in which "experts" take responsibility for their declared semantic content. Tim Addins gives us a highly systemic lenses in which "the boundaries of knowledge" are for machines, teaching us all about induction, deduction, and abstraction, and how the latter two are only found in highly structured domains. The editor, Kevin Jones, filled an erudite text with his own text, English and LinguisticsPhillip Brown's Research Associates, offering a well written argument for responsive glossaries, which I found full of interesting insights.

HARD COPY ROUNDUP


What different about this one is that it has lets of proper names, including celebrities and institutions, among the 16,000 entries. Magnificent, indispensable, and Glamer are all in there.


This book examines what happens linguistically when you translate. Though not light reading, it doesn't require a lexicon in linguistics to be understood. Moving proceeds step by step, explaining terms such as "word order" and "semantic equivalence" as you go along. It's a direct look into a hitherto fairly unexplored field of language, and also rages widely over past types, from fairly to extreme stripping.

"Introduction to Second Language Research", edited by C. Freeman and C. Kepner (Multilingual Matters, Clevedon, Avon, UK). Price: £40.00 (US$60.00). (cloth), £18.00 (US$25.00). (paper).

Endnotes on historical and contemporary language research, this book has a second language, and leads translations approaches.

NEW JOURNAL

International Journal of Lexicography (volume 1, number 1), edited by Robert Brain (Oxford University Press, Oxford, U.K., £10.50 (US$16.00)).

This new quarterly academic journal, backed by the European Association for Lexicography and the Dictionary Society of North America, carries articles on lexicographical issues and book reviews. The first issue in this first issue is on British and American grammatical differences, the contrasting analytic of terminological systems and bilingual technical dictionaries, with an issue of the British Rhetorical reference in analectical dictionaries, and the problem of definitional language.
TEACH YOURSELF MACHINE TRANSLATION


This book is based on reports prepared for the Canadian Secretary of State's Department from 1980 to 1984, at a time when that department was turning away from "conventional MT development" and toward evaluating conventional systems. It was referred to as "Second Generation" MT system. The design, testing, and evaluation of three chapters dealing with these three types of MT systems; their linguistic characteristics; and the general methodology of evaluation by the user.

In Chapter 1, the authors deal with criteria to classify MT systems: degree of automation (batch, interactive, computer aided); depth of analysis (local vs full sentence); type of translation (general purpose, specialized); context; and selection of lexicon from dictionaries. They make a strong case against the "local analysis" version, i.e., almost word by word analysis and context and rearrangement - arguing that only full analysis of the sentence can yield consistently good results. This discussion gives a good overview of the various types of MT systems and what solutions are possible.

The second chapter describes the various linguistic components of MT systems. On the lexical level: a description of the content and structure of MT dictionaries, and a warning against "unisense" lexicon entries. And on pre- and postprocessing: how to handle various typographical features and break up text into significant processing units (words and sentences). The section on morphology provides a clear overview of inflectional, derivational, and compositional morphology. The one on syntax deals with problems of charting, topic-background, topic-background, and topic-background, with special emphasis on the complex cases illustrated by actual sentence examples, taken from the TURM(A)-Translation corpus. The semantic section covers various interesting issues such as selecting relevant senses and producing "smart" output. Through these two chapters, the authors also raise a number of design issues, such as the analysis of source languages and the linking of the analysis to the production of the original sentence. They then go on to the linking of the source sentence to the Target language and the translation process of the source sentence to the Target language. The chapter concludes with a discussion of the role of the user and the interaction between the user and the system. The book offers a comprehensive guide to the design and implementation of machine translation systems. It is a must-read for anyone interested in the field of computational linguistics and natural language processing.
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This month's excerpt comes from the ever-quotable Lewis Carroll and his ever-delightful Alice in Wonderland. It was submitted by Jim Goodwin of the Center for Informatics and Consultancy Europe (CIDE) in Amsterdam. As usual, readers are invited to submit their own suggestions for inclusion in CyberLex, the language technology in action.

"Importuneability? That's what I was asking!

"Would you tell me, please, is there any reason why--"

"Alice, 'There's not any reason at all,' said the Cat: 'I didn't ask you to say why."

"I meant,' said Alice, 'that it isn't often I have a chance of being importunate, so I wanted to know, you know, whether it's the right thing to do.'"

"That's a great deal to make one word mean," said Alice in aFeeble tone.

"When I make a word do a lot of work like that," said Humpty-Dumpty, "I always pay it extra."
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Haviera Hollander has settled down, somehow—what in her own way, well, not really I guess. At least she finds her livelihood on the right side of the law now, making more money standing up than she ever did lying down.

Hollander jumped spectacularly into the limelight in 1971 when she was arrested on the evening news as "New York's foremost madame." She wrote about her fronted-looking years in the bestselling book *The Happy Hooker*, co-authored with Robin Morgan of The Green Book and The French Connection. This widely translated book made her an international celebrity.

Currently, Hollander writes the "Call Me Maude" agony aunt column in *Mainstream*, in which she mostly seems to be calling out to make a judgment about what is "normal" for all kinds of combinations. She also has a telephonic sex (see when she does her best to convince heavy breathers to talk about their feelings and attitudes about sex. She's also active as a lecturer, and tells in the rest of her time writing books about her semi-retired adventures.

Hollander splits her time between Amsterdam and her home in Madrid, Spain. Since her arrest, she has been persona non grata in the United States (except as Haviera Hollander or Vera de Rina, her real name). Her name is usually alluded to as being involved in various situations and half-met. She has a paradoxically disarming ability to stare and dominate a conversation.

Her affection for gadgets, like glass-fiber and kinescope, is not uncommon. She doesn't collapse on themselves, betrays a love/hate relationship with technology. She calls for help when activating the complex computer disk player which can shuffle five disks at a time with fancy Susan arrangement. Her latest book is the autobiography that she writes to the help of the friend who helped her with her television memorabilia, "God's clown on the writing profession." The nickname for her PG is "the green monster."

When pressed to describe what she considers her profession—columnist, writer, columnist—Hollander compromising on "an all-around hooker, a poly-sexualist who tries to bring a certain message across to the public." Over a decade ago, she is "very down". Books have appeared in her name, many in conjunction with another co-author. Most of them sport covers with women in just enough clothing to satisfy mainstream bookstores, and in poses varying from the uncomfortable to the ridiculous.

Hollander seems to be a bit worried about her books. She describes questions often asked whether she considers herself a serious writer, but clearly doesn't pretend to create great works of literature. Some of her work is surely to pay the bills and fit what people expect from the Happy Hooker. "The fiction books I don't stand behind," she says. "They're more like Harlequin or gothic romances."

She tries to sneak some real ideas into her autobiographical books, but finds difficulty. Her reputation and the expectations it brings have trapped her to a certain extent. Her readers and publishers expect a certain kind of book. It's hard to break out of the pattern, and since they pay well for it, why bother?

Sex and Haviera Hollander are invariably noted. Some would see that as a stranglehold, but it doesn't necessarily bother her; much of what she has to say is unrepeatable to sex. She finds frustrating the attitude which hangs a "therefore" after that connection, that people connected with sex cannot say or think anything mention then soft porn.

Despite opposition from her publisher, some of it with boos, mutterings, cry-salvage on work or sports. They were all lonely in offering ways. Her programs have taken on the look of a therapy session, with some dirty stories involved. She keeps the quarters rolling, of course.

Hollander finds it generally hard to express her ideas fully in book form. "I haven't been able to really get the level of feeling down on paper. I need the stimulation of wordplay between two people. Emotions don't come over in the written word, so they don't come over in the books very often."

The next medium for her message is talk show on Dutch television. Its format will have added to the Denee Edward Experience, or Dr. Ruth Westheimer and Phil Donahue. "I'm doing this talk show, to prove that I'm more than an ex-whores who's making a lot of money."

Hollander often comes across much better in person, once her reputation can be forgotten. In a recent program on Dutch television where aspiring young journalists competed to see who could get the best interview, the panel of judges were visibly surprised that she could put more than two words together. Her interviewer even the price, too.

"Sometimes when I get interviewed on a talk show, people won me that I'm not allowed to use sex words like 'hook' and 'sex'. I don't need to do that. My power lies in wordplay, the double entendre. I've discov- ered the best four-letter word for inter- course is 'talk.' I got a good reaction on a talk show by saying that sex is between the ears and just between the legs." Puns and suggestive jokes pepper her speech. "What's the worst thing you can get from a telephone sex?—Hearing AIDS."

She is currently struggling to get a visa to the United States to underbite interview. "My books don't sell anywhere because we can't talk about sex in the States. No. No. But, despite legal fights and entertainers that she's not active in prostitution anymore, that she's become "an upright citizen—no longer a horizontal one."

She plans to return to the eventual trip with the zeal of a missionary. "If ever there's a country that needs Haviera Hol-lander right now, it's the United States."

The latest edition of her most famous book concludes: "The world after the Pley-919 is much more exciting and liberal. But the pendulum has swung back, and the boards of Parisian are once more buying for blood." She concludes the general spirit of "crepaci- nocy and pornography" which it detects, and Edwin Meese's commission on pornography, in particular. Wouldn't THAT make a great talk show essay?"

Jeffrey Mann in a technical writer and con- sulting living in Amsterdam. One of the first books he recalls reading all the way through was a par- ticularly of The Happy Hooker at the age of 13. At that time it was educatived"
Beyond Spreadsheets
Of course, heavy-duty number crunchers have a well-deserved place in the Digital Hall of Fame. But what most and more people now want to do with their computers is process not numbers but text: word processing. Taffler has estimated that the purpose of printed informa- tion is exceeding every three years. For public institutions, commercial or- ganizations, and individuals alike in our overweening complacency, the quest to process human language is in more and more urgent demand.

This demand has brought with it a whole new generation of computer rods designed to shape, store, and acquire word-based data. Since wordprocessors, we’ve had spellcheckers, electronic thesauri, and style checkers. Now, intelligent grammar checkers are on their way.

The demand to improve test preparation has given us desktop publishing. And the need to run non-electronic books has spawned scanners and optical character rec- ognition (OCR) software.

Meanwhile, RAM resident look-up engines and CD-ROM databases have opened vast archives of reference data to the stand-alone micro user. And now, more and more wordprocessors are hoarding their modern data communications networks, both to speak and acquire ever-vast volumes of information.

Even machine translation—long scorned as unlikely in the near future—now seems to be happening in a commercial reality. And demand is bound to boom, as our global village’s translation problem gets murkier and murkier: by one estimate, worldwide translation costs are around $24 billion and growing 20 percent a year.

Spreadsheets are old hat.
The techniques covered by language technology were some of the most important—and most crucial—in computing in the past 12 months. LT has written about:

- Optical character recognition
- Voice checkers
- Intelligent editors
- Computer-aided translation
- Machine translation
- Speech recognition
- Language understanding
- Terminology databases
- Desktop publishing
- Electronic filing
- The on-line industry
- CD-ROMs
- Even on a silicon author

The promise of the future is of machines that will be capable of understanding and generating both spoken and written lan- guage. Voice-synthetic modals are already a reality; small, hearing- impaired users—the visually handicapped to input computer data without need of a keyboard.

Wordprocessors
But language technology is about more than just products and research trends. It’s also about the worldwide community of people who work with words—and a fascinating, many-faceted community they are.

People like Alan Kay, computer visionary and inventor of the graphic interface that made Apple’s Macintosh the best selling computer in America. This is what he told LT’s writer about innovation: "Nobody had a copying problem until the Xerox machine came along, and then all of a sudden everybody had a copying problem. The big hit of the 20th century created a need we could fulfill."

And Jeff Reifel, who has developed a revolutionary word processor that allows users to begin typing without having to access an operating system.

He told LT: "An operating system is a problem you have to hassle with before you hassle with the application."

Magi King, the chairman of the machine translation community and head of Syntax’s Institute for Semiotic and Cognitive Studies, informed us: "The Japanese have seen the lead in machine translation— because they’re not afraid of investing in long-term research."

And David Kunlin, publisher and editor-in-chief of three of the world’s most widely read maga- zines in personal computing—PC World, MacWorld and Publisher—said recently in LT: "The future belongs to electronic media— paper will be used for napkins, toilet paper and paper cups."

The case, one-time psychiatrist guru, is now heard of the futuristic software house, whose mascot product is a psych- ological self-help game called Mind Mender. He told LT’s US West Coast correspondent: "The ultimate act of release in the Information Age is not going to be with someone. It’s, ‘I’ll show you my personal database.’"

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