### Spotlight on the News

**L&H Buys Globalink, Other MT Companies**

*Based on press releases*

BURLINGTON, Mass.—Lernout & Hauspie announced on July 20 that it signed an agreement to buy Globalink Inc. in an all-stock deal valued at around US$ 70 million. At $5.94 per share of Globalink’s outstanding common stock, and with some 12.6 million shares outstanding, the total price equals approximately 15.5 million shares of L&H common stock. The acquisition of Globalink was finalized on September 29. L&H has also acquired ALogic Corp. and NeocorTech, two Asian language translation technology companies, for $5.5 million in cash and $1 million in cash, respectively.

“These acquisitions enable L&H to add a number of widely used languages to our speech and language products and services,” said Gaston Bastiaens, president and chief executive of the company. The languages gained through the acquisitions will be integrated into L&H’s products and services, such as their search, summarization, and translation service for the Internet known as iTranslator. Various Italian, Portuguese, Japanese, and Chinese language pairs will be added to their present offerings. The Globalink purchase will not only give L&H new MT language pairs but also a series of new retail translation products, an e-commerce translation business, and access to Globalink’s multinational customer base.

The ALogic and NeocorTech acquisitions provide Chinese-English and Japanese-English machine translation language pairs, Web translation, and optical character recognition products.

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... L&H from previous page

"The Internet has become a fundamental tool in today's global economy, spurring the need for translation of its primarily English-language content into multiple languages," said Bastiaens. "Machine translation tools are the most logical, efficient, and effective means to begin Internet translations. L&H is leading the market in that effort with a large number of customizable language offerings."

The latest acquisitions will all become part of the Language Technology Division, headed by Peer van Driesten. In 1997, L&H acquired van Driesten's company, Munich-based GMS. With the acquisition of Globalink, L&H now possesses two powerful, yet very different MT systems. The GMS merger brought the METAL-based T1 system into the L&H fold, and the purchase of Globalink brought its celebrated "Barcelona" system into the company. A major challenge facing L&H is the long-term integration of these two systems. The San Diego R&D office of Globalink, where the Barcelona system was developed, has remained intact throughout the merger process and will be instrumental in future R&D efforts and the resolution of system integration issues.


Instant Translations Support
Junior Summit '98

Young People Around the World Communicate Using Software From Transparent Language

(Based on press release, 9/23/98)

HOLLIS, N.H.—Translation software from Transparent Language has enabled nearly 3,000 children and youth from 138 countries to convene on the Internet during September, October, and November of this year as participants in Junior Summit '98, an international symposium hosted by the Massachusetts Institute of Technology Media Lab. Youngsters aged 10-16 are exchanging ideas on such issues as children's rights, telecommunications access, individual privacy, personal health, environmental responsibility, and world peace. Much of the success of this worldwide symposium hinges on overcoming the language barrier.

"Machine translation is crucial to the Junior Summit '98 on-line forums," says Scott Gunn, technical director for the Junior Summit. To facilitate this communication across geographic and cultural barriers, the organizers of the Junior Summit '98 are relying on the Enterprise Translation Server, which offers MT in the following language combinations: English-to-Spanish, English-to-French, English-to-German, English-to-Italian, English-to-Portuguese, Spanish-to-English, French-to-English, and German-to-English.

How It Works

Participants communicate using e-mail and chat clients with instant messaging developed by leading publishers. These are then integrated with the Enterprise Translation Server by the MIT Media Lab to meet the specific needs of Junior Summit '98 participants. Based on a participant's profile, the host at MIT sets the language preferences for each participant and their e-mail and chat messages are presented in the language of their choice.

Users of the e-mail client send messages in their native language. The recipients get two copies of each message, one in the original language and the other in the form of a raw machine translation. Forum participants also use a chat interface Web page hosted by MIT Media Lab to exchange messages. This chat client works in much the same way as the e-mail client. Users enter text in their native language and receive responses in both their native language and the language of the sender.

Participants are also able to access translations via a Web page on the Junior Summit Website. This Web page allows users to cut and paste text into a dialog, choosing the languages to trans-
Transparent Language sells through multiple channels in North America and abroad.


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Product Showcase

SYSTRAN Enterprise:
Intranet/LAN Software

Independent JAVA Applet
Replaces Need for Local Client

[Based on press release: 9/28/98]

SAN DIEGO—SYSTRAN Software, Inc. announces the introduction of SYSTRAN Enterprise, a client/server translation software product tailored for use on an intranet, extranet, or LAN. This powerful language translation product runs on the same translation engine as the company’s highly acclaimed standalone software.

SYSTRAN Enterprise responds to the translation needs of corporations, equipping companies with the tools they need to gain or maintain market share in today’s fast-paced international business environment. This TCP/IP-based product is designed to provide company network users with easy access to the translation server by any client, anywhere in the world, operating on the network through an IP address. Its powerful capability will easily allow company employees to translate Web content, e-mail, and other documents in “real time.”

Other features include a platform-independent JAVA applet located on a Web server, a documented API to develop customized clients, concurrent user configurations (clients concurrent and/or locked), and more.

Compatible with Windows 95/98 and NT 4.0 with a server running on Windows NT 4.0 or higher with JAVA 1.1-compliant browser and Web server software, SYSTRAN Enterprise translates 3,700 words per minute with a Pentium processor. Both multi-threaded and multi-tasking, it includes plug-ins for use with Internet Explorer, Netscape, Microsoft Word, and Eudora Mail.

SYSTRAN Enterprise is available in English into/from French, Italian, German, Spanish, Portuguese, Japanese, and Korean, as well as Russian-into-English and Chinese-into-English. Additional language combinations are currently under development.

Sold through the company’s worldwide network of distributors and resellers, SYSTRAN Enterprise is priced in accordance with the number of users and the number of language pairs applied.

SYSTRAN is headquartered in France with operations offices in La Jolla, California, in the United States and a development facility in Luxembourg. Further information: www.systransoft.com. Contact: Reba S. Rosenbluth, Director Sales & Marketing; +1 (619) 459-6700; rrosenbl@systransoft.com.
Déjà Vu 2.1
Translation Memory

[Adapted from Lingualizer Localization E-zine]

Déjà Vu version 2.1 is an industrial-strength computer-aided translation system that is both customizable and user-friendly. Basically, Déjà Vu works by storing translations in a memory database and instantly retrieving word strings that match or are similar to the material being translated. It includes TermWatch, a fully integrated terminology management system, as well as a file alignment wizard to support the retrieval of past translations stored in the system’s memory. Déjà Vu’s ability to handle very large databases makes it equally suited for individual translators and translation companies.

The program employed by the user during the translation process is called Déjà Vu Interactive (DVI). It offers a large range of time-saving features. For example, it can:

- Pretranslate a project by searching the memory database for all the sentences in the text. All the exact and fuzzy matches are inserted in their correct places in the document.

- Resort to AutoProcessing, a set of procedures that DVI carries out when it has nothing else to do, when the user stops working for more than a few seconds. It takes a closer look at the memory database than in the pretransliteration phase, and in many cases it succeeds in assembling a translation when pretranslation has failed.

- Allow the user to propagate a new translation when nothing was found in the memory database during pretranslation. Fuzzy propagation, in the case of similar sentences, is also possible.

- Scan the database at any time for a given source sentence or portion thereof. Scanning times typically range from a few milliseconds to a few tenths of a second.

- Look up a word in the TermWatch terminology database with just a click of the mouse.

- Build the project lexicon using the memory database or the terminology database.

- Check spelling in any of the following languages: US English, UK English, German, Spanish, Finnish, French, Italian, Danish, Brazilian Portuguese, Norwegian, Dutch, or Swedish.

- Arrange the input sentences in alphabetical order so that the user can spot and translate similar sentences all at the same time.

- Prevent the translation of specific sentences by "sentence-locking."

- Count the number of source or target words and characters per file or per project and save this information for invoicing.

- Invoke project management and project security options that simplify the completion of large multi-file and multilingual translation projects. Not only can several translators work on the same project in different languages, but several translators can work in the same language on the same project.

- Distribute satellite assignments and receive or distribute new database entries as separate text files.

DVI supports the following file formats: plain text, Word, RTF, SGML and its subsets, FrameMaker, Interleaf, QuarkXPress, HTML, HTML Help, Trados WorkBench, IBM TM, RC and C/C++. It includes utilities for maintaining memory and terminology databases. All databases can be reversed—for example, a database for English-German can be reversed to German-English.

Déjà Vu runs under Windows 95 or Windows NT Workstation. For optimum performance, a Pentium processor with 32 Mb RAM is recommended. Technical support is free and unlimited.

A free 30-day full-feature evaluation version of Déjà Vu may be downloaded from www.atril.com. Site: Contact: Atrial Software, Alonso Saevedra, 3 28033 Madrid, Spain; fax: +34 (91) 383 5286; e-mail: dejavu@atril.com.

Perfect Japanese-English
"Translate, Sesame!"

[Adapted from AAMT Journal]

"Translate, Sesame!" has been developed by MT Laboratory Ltd. (known for its "Bravice" series) in technical collaboration with AI Software. The product invokes sophisticated example-based pattern-patching technology to generate natural-sounding sentences. The resulting translations are usable for business purposes.

There are many applications for Translate, Sesame!—for example, translating e-mail messages and business letters from Japanese to English, assisting in the composition of Japanese sentences on a Website, or translating Japanese-language Web pages (HTML files) into English on-screen with all layouts and links retained. Translation speeds of 30,000 to 80,000 words an hour can be achieved with a Pentium chip running under Windows 95.

The product can be used with either Netscape Navigator or Microsoft Internet Explorer. Translation may be done in Microsoft Word 6.0/95 (Ichitaro 6.0 or in other applications using the drag-and-drop function. In the clipboard monitor function, the translation begins automatically when a text is copied onto the clipboard, and the output is returned to the clipboard. Finally, of course, text in Japanese may be keyed in directly to "Translate, Sesame!"

A 200,000-term dictionary package, covering terminology in 27 subject fields, is available on CD-ROM.

Continued on next page . . .
System requirements. Operating system: Windows 3.1 Japanese ver. (12 MB or more of RAM), Windows 95 (16 MB of RAM), or Windows NT/Japanese ver. 4.0 (20 MB of RAM); hard disk space: at least 22 MB; browser: Netscape Navigator 2.0/Japanese ver. 3.0 or Microsoft Internet Explorer 2.0/Japanese ver. 3.0.

Standard price. Perfect Japanese-English "Translate, Sesame!": ¥19,800 (tax excluded); terminology dictionary package: ¥14,800 yen (tax excluded).

Further information: A1 Software Ltd. 3F Hatsudai Hikariyama Bldg., 1-53-6 Hatsu, Shiba-ku, Tokyo, 151, Japan; tel.: +81 (03) 3217-1722; fax: +81 (03) 3217-5911. Hours: 10:00 a.m. - 12:00, 1:00-5:00 p.m. (Monday through Friday). Head Office: Daiichi Insurance Bldg., 2-1-27 Chuo, Matsumoto-shi, Nagano-ken, 390, Japan.

"This, Japanese-English!"

[Adapted from AAMT Journal]

Catena, Ltd. has launched "This, Japanese-English!" in response to the need for translation of English-language documents downloaded from the Internet. After at first merely using the Internet to gather up-to-date information from overseas, users in Japan are now transmitting their own messages through home pages and e-mail. Catena's new J-E package addresses this demand. It has been designed with the individual user in mind, with a low price tag and at the same time translations of very good quality.

The new product offers the same ease of use as its sister, "This, English-Japanese!", which has been a market leader among the low-priced English-Japanese translation tools with total sales to date of over 400,000 copies. The Windows 3.1 version of the E-J product received accolades at the Japan Software Awards for 1995, and the following year its Windows 95 version was again nominated in the business software category for the same award.

Both the J-E and the J-E systems achieve translation using the semantic transfer method. Sentences may be translated in their entirety, or using the "simple sentence translation" function, in which the user has access to several editing functions. Sometimes only a partial translation is produced.

The translated output can be transmitted immediately to the corresponding e-mail software (Microsoft Exchange or Eudora Pro), since the product conforms to the MAPI specifications for Windows 95.

In addition, a clipboard translation function is provided to facilitate translation for the Internet browser or the word processor.

System requirements. Operating system: Windows 95 and Windows 95 Japanese version (16 MB of RAM); hard disk space: at least 22 MB; medium: CD-ROM.

Standard price. ¥12,800.


"Transit" from Star

[Adapted from AAMT Journal]

"Transit," the new translation assistance tool from Star Japan Ltd., addresses the growing need for Japanese translations of product instruction manuals. It was developed by Star's head office in Switzerland, together with a group of enterprises in Germany, and localized to operate in the Japanese environment in collaboration with Star Japan.

The system offers the following features:

- Filters to handle formatting and text in many DTP and word-processing software packages.

- Pre-translation, in which portions of the upcoming text are automatically replaced by sentences from previous translations.

- Fuzzy matching, in which approximate translations are provided in place of the new text, based on user-specified proportion of matches.

- Multi-language capability: Japanese, English, German, French, Chinese, Korean, Thai, and many others.

- Scratch pad, or separate window for temporary storage of each translated portion, easily erased as necessary.

- Multiple windows for simultaneous viewing of text in original language, target translation, scratchpad, dictionary, etc.

- TermStar dictionary manager for searching and recording terminology. The user can make any number of dictionaries and update them easily.

The foregoing set of tools enables "Transit" to enhance productivity in both translation and desktop publishing. The software is all the more powerful because the dynamic links with TermStar help to ensure the quality of translations.

System requirements. Platform: IBM PC-compatibles; Operating system: Windows 3.1, 95, or NT 4.0; memory: 16 MB of RAM (24 MB or more for Windows 95); hard disk: 80 MB or more; medium: 3.5" FD (1.44 MB).

Further information: Star Japan Ltd., Matsuda Bldg., 3-14-13 Shibuya, Minato-ku, Tokyo, 105, Japan; phone: +81-3-3457-1549; fax: +81-3-3457-6957 E-mail: transit@starjapan.co.jp.

Editor's note: Future issues of MTN will report on products from Hitachi, IBM, and Inter Group.

MT News International 5
Users’ Forum

Editor’s note: With this issue of MT News International we are reviving the effort to solicit more reports of user experiences and feedback. MT and MT tools users are encouraged to write in and tell us what they are using, what aspects have been helpful and which other ones need improving, or simply give us a piece of their mind. We would welcome a volunteer to head up this section on a regular basis. –MV

Déjà vu:
A Translator’s View

Peter Kjeldsen
Localization Consultant
CC, MTA

[Reprinted from Lingualizer Localization E-Zine]

Let me start by saying that Déjà Vu 2.11 is a translation memory tool which is very different from most of its competitors. First of all, when you read about the features in Déjà Vu, it strikes you as a finished product. As a professional translator, I always look for certain features in translation memory tools but rarely find them. However, Déjà Vu had it all: a text alignment tool, a glossary management tool, spell-checking, plus extra features I will tell you about later.

When I started to test Déjà Vu, I had never seen the program before—not a single screen. I wanted to find out if it would be able to use the program without reading any documentation at all (my test of user-friendliness). Thinking back on the times I used competing products, I remember the hassle of having to learn a strange user interface. Well, Déjà Vu took less than 5 minutes to install and about 15 minutes to be productive, with no reading. At that stage I knew that this program would be a pleasant experience.

I had loaded a Word document with plenty of graphics and tables. After finishing the translation I exported the text back out to Word format. I opened the file to check that everything was formatted as it was in the original document, and it was! No bullet-points were lost, all the formatting was kept.

Now it was time to test the text alignment tool. It was easy enough to import both the source and the translated document. The File Alignment Wizard guides you all the way. After the import you have to check the alignment of the two imported files; Déjà Vu aligns the files as well as possible, but you have to do the final adjustments. The time it takes depends on the file size. The word count of my test files was around 6,000, so it took me about 45 minutes to go through and adjust the alignment of the two files. Then I exported the alignment database to the newly created translation memory.

I ran a pretranslation on the source file in the hope that Déjà Vu would not be able to "translate" the whole document. And it could not—basically because during the alignment process I joined source text as well as target text (without mixing them) and thereby created a translation memory that was different from the way Déjà Vu would read the source document.

I had a very effective way of testing the fuzzy matching capabilities of Déjà Vu. The source document would now be regarded as a different version. Déjà Vu handled approximately 60% of the document the first time. Playing around with the fuzzy settings, which are controlled with a sliding scale from 0 to 9, I managed to reach a pretranslation level of 92%, which I consider a very good result. I did my best to confuse Déjà Vu.

Even though Déjà Vu is a stand-alone application, it uses Microsoft Word to read and write the Word format. However, the conversion is done without user intervention, so you don't really feel it. All your work is done in Déjà Vu's easy-to-work-with environment. Déjà Vu is a very robust piece of software; it did not crash once under normal use. You can crash it, but you have to go out of your way to do it.

The user interface across the different Déjà Vu modules is very consistent and easy to work with, and the price of only $495 definitely places Déjà Vu at the top of every translator/localizer's list of wanted tools.

Price. Déjà Vu receives TEN stars out of ten, because Déjà Vu is more than likely the best buy today when comparing translation memory tools.

Features. Déjà Vu receives TEN stars out of ten, because it is a complete tool with an alignment tool and a glossary tool included—plus you can extend its capabilities with extra filters.

Functionality. Déjà Vu receives NINE stars out of ten, because the program does not crash easily and even when you manage to crash it, the loss of work is minimal. Apart from that, it is fast, responsive, and does not leave you wondering if the program has crashed or if it's processing data.

User-friendliness. Déjà Vu receives EIGHT stars out of ten. Déjà Vu is not a mix of macros and other small programs all over the place, it has a nice standardized user interface across all modules.

Overall rating. Déjà Vu receives 37 stars out of 40, which indicates that this program is TOP OF THE RANGE. Avalon Technologies recommends this program to anyone who wants to purchase or upgrade their existing translation memory technology.

Further information www.atril.com. [See also Product Showcase in this issue.]
The MT Market

Editor’s note: At MT Summit VI in San Diego, a panel of experts presented their views informally on the MT market in the three IAMT regions. Since their papers were not published in the Proceedings, MT News International has arranged to offer summaries of the transcripts in this issue (Europe and the Americas) and the next (Japan and the Asia-Pacific region). In doing so, we open up a new section of the newsletter and encourage contributions on the subject of the MT market in the future.—MT

A European Perspective

Colin Brace
Language Industry Monitor

Multilingual communication is really the bottom line of the problem we are trying to tackle with machine translation technology. We are moving away from a technology-driven attitude to a more solution-oriented approach. I would also like to point out that MT technology itself is only part of the solution. I think that there are other approaches which can help us solve the problem, such as language education. I am hesitant to put too much emphasis on the technological solution.

In agreement with what other speakers have presented at this Summit, I would like to emphasize the importance of services. Services are really the name of the game. It is clear that there is not a lot of money to be gained simply from developing MT. It is the whole package—all the systems and services around MT—that is important. This is particularly germane to the European situation.

Another point I'd like to make is that we can now confidently announce the death of the BIG PROJECT, the multi-million-dollar, ten-country project. I don't think we can expect to see any more big projects proposed in the next decade. Eurolang was the nail in that coffin. It began with a huge consortium in the early 1990s, making big claims about an MT system and products which it couldn't deliver. The leftover software was given away at bargain basement prices. It was a scandal in fact. French taxpayers paid out 40 to 50 million francs for it, and very little has come of it.

I would point out to the IAMT world that small is beautiful. I know that MT systems tend to be big and uninviting. I see the continued evolution of small specialized programs for specific domains, small translation systems for documentation purposes.

Even the assessments by Ovum Inc. have a difficult time trying to define what the MT market really is. I am deeply skeptical now when I hear about some grand new paradigm approach. It seems to me that the old systems and the existing techniques are still the way to go, with incremental advances and long arduous development programs. I am skeptical about anything big and now developing in the near future.

One thing that is still pervasive in the translation software world is the spreadsheet mentality. You may recall how in the 1980s Lotus made a lot of money when they developed their 1-2-3 package. It had a tremendous impact on the business community and how it operates. The idea that one can make a lot of money by building a translation environment that can be tailored by individual users is still very seductive. But spreadsheet technology is based on algebra, which is far easier to define and model than contemporary computational linguistics. We shouldn't be distracted by that.

I also think that the idea of a software suite that offers one package for all people is a very seductive idea. There is a strong temptation to develop the same kind of software for language translation—products that offer all things to all people, like Microsoft Office. For linguistic software, that will work for the foreseeable future.

My expectation is that Microsoft will dominate and control this industry within the next five to ten years. Linguistic technology is too important for Microsoft to leave on the table. I think that over time more and more linguistic functionality will migrate to the operating system. In five or ten years’ time, when translation and second-language writing tools become more viable applications, I think you will see Microsoft come in and develop, buy, or acquire these applications.

A View From
The Americas

L. Chris Miller
MCS, Inc.

What is machine translation? For present purposes, let's start by assuming that machine translation is software that replaces text in one language with text in another language. The minimum requirement in order to be classified as machine translation is that the software be capable of reordering words. For example, 'the red house' needs to be translated as la casa roja or la maison rouge.

Machine translation is not word-for-word translation which replaces single words and/or phrases exactly, where 'the red house' might become *la roja casa.

Continued on next page...
or "la rouge maison." It does not include programs that have translation memory—in other words, that deal with previously translated material. There are also multilingual programs that use the term "translation" but which really mean character set (code page) converters, such as viewers, web browsers, and spelling checkers.

Nor does the term "machine translation" apply to novelty programs such as the Klingon Analyzer, based on a language invented for use by aliens in the Star Trek movies and television shows; Valley-Girl-Speak; or Jethro-Speak, which turns "I am tired" into /se really tired/. These fun programs seem to do translation, but really they only use phrase-replacement techniques.

Translation Market Projections

According to Eric Adams in World Trade, the European Economic Community estimated in 1995 that the total market for translation was worth US$120 billion and growing at a 20% compound annual rate. He also estimated that multinational corporations spend approximately 1.5% of their total annual revenue on document translation. Globalization is creating new markets for translation technology. Revenues have soared in the MT market from the effects of globalization. The Ovum report for 1994 estimated that sales of translation products and services would reach US$252 million in 1997, a figure that has easily been surpassed.

MT Industry Highlights in 1997

This year Globalink opened up an exciting and receptive new market—namely, Brazil. Between March and May 1997, 15,000 orders were placed for English-Portuguese MT packages. In May 1997, when the new products arrived in Brazil, 5,000 boxes were sold at one computer trade show. Sales amounted to US$15 million during the first six months of the product’s availability, and revenue amounted to more than US$5 million. Indeed, Globalink’s Power Translator headed the list of top-selling retail software in Brazil for May 1997, followed by Microsoft Windows 95 Upgrade, Microsoft Office Pro 97, Symantec’s Norton Antivirus 95 2.0, and Microsoft Money 97.

At the same time, Globalink’s Barcelona engine has matured. Linguistic evaluations during 1997 showed that Globalink could hold its own with well-known robust systems such as Systran and Logos. Power Translator 6.2, a localized version, was released for overseas use only. Documentation is available in Spanish, French, Italian, German, and Portuguese yet not in English. The 6.0 version currently available in the United States is lacking about 12 months of non-directed linguistic improvements included in the 6.2 version. The company’s Translation Management System provides a way of automating the workflow processes in a human translation bureau. This is an excellent product, but it has proved to be somewhat difficult to market. The Server-side Web Translator lets you add machine translation capability on any website by inserting a few lines of code, similar to the way one would add a counter to a website. Globalink also sells a software development kit, which allows other companies or individuals to develop language pairs for the Barcelona platform.

Systran had a very successful year, too. Considered the granddaddy of machine translation, it has been around for 30 years and has 28 language pairs. Systran now offers free on-line Web and text translation via the AltaVista search engine site (www.altavista.digital.com), which has mainstreamed the accessibility and usefulness of machine translation. The company has brought out new versions of Systran PROfessional and Classic, which are now very competitive products in the low-cost PC market. In the past, Systran had always offered high-end products developed exclusively for government and corporate sales. Now the company has moved into retail sales and changed its marketing strategy. They are providing individual users with training and access to their rules, as well as a new on-line service.

Between March and May, 15,000 orders were placed for English-Portuguese packages.

Systran now offers free on-line Web and text translation via the AltaVista search engine.

Lernout & Hauspie Speech Products rocked the industry when it acquired CMS for approximately US$147 million. $10.7 million of this amount in cash and 34 million in newly issued shares of L&H common stock. The acquisition is expected to be non-dilutive for 1997 but is expected to contribute to the company’s earnings after May 97. [Editor’s note: For updates on L&H, see “Spotlight on the News” in MTJ #19 and the current issue.]

Alis Technologies took a lot of machine translation products from different companies and made one unified interface, so the user doesn’t have to learn every single product. Unified and simplified complete translation services for the corporate customer is something that many end-users have requested.

Transparent Language is a company that seemed to disappear for a while but resurfaced with Easy Translator, a $129 machine translation package, which won the 1997 John C. Dvorak Telecommunications Award for techni-
An Owe to the Spelling Checker

I have a spelling checker,
I love it with my PC,
It plane ee marks four my revue
Miss steaks aye can knot sea.

Software Development

All software products should be developed from the start with international markets in mind. When a product is initially developed for a specific local market, it needs to be retrofitted for use in other countries or places. The process of internationalization, or globalization, requires that we create software that is prepared for use in many locales and supports many language scripts, as well as different hardware and formats for numbers, time and dates, currencies, etc.

Issues for Developers

There are many legal issues between developers and users that are not presently being addressed. Most software products are covered by or are infringing on one or more patents. An interesting legal question arises when you use a machine translation software program: Who owns the results? Some developers actually claim the output and others relinquish it to the end-users. Does the source text owner retain any rights to the output? Other issues include standardization: a uniform applications processing interface for MT (MTAPI), and/or support for different character sets such as Unicode. We need realistic expectations for licensing agreements. The continuing trend in the computer industry states that the value of software is negligible. One example is that browsers are freely available as the developers battle for market share, yet shrink-wrap sales of browsers are still viable. Plug-ins, add-ons, customized versions, OEM and bundled versions, and technical support generate revenue. The prices of individual machine translation software products are likely to continue to drop even as usage and sales go up.

Issues for IAMT

IAMT and its regional associations need to keep track of commercial machine translation products, research systems, proprietary systems, developers, and MT-related human resources. We need to define our industry or at least set minimum definitions. We need to set standards and perform evaluations. We need to provide information. We need an IAMT seal of approval. We need a Code of Conduct for advertising.

Predictions

New and unique uses for MT are constantly emerging. The Internet will continue to fuel awareness and need for language tools such as machine translation software. The value of the engine will drop, and pre- and post-processing tools will become more important and more prevalent. There will be an increase in systems developed for languages of limited diffusion. Third-party support networks will be created in response to the growing demand for people skilled in dictionary customization and integration of machine translation systems and other language tools into the translation workflow process.

The prices of MT software products are likely to continue to drop even as usage and sales go up.
Association News

AAMT

Committee Report on AAMT/IAMT Bulletins

Hirosato Nomura
Chairman, Editorial Board, AAMT Journal
Member, Editorial Board, MT News International

Since its foundation, the Asia-Pacific Association for Machine Translation (AAMT) has been publishing its bulletin, the AAMT Journal, on a regular basis, and plans to continue doing so. The Editorial Board counts on the members' dedicated support, and it hopes that the journal provides them with a useful reference.

As is well known, AAMT, together with the Association for Machine Translation in the Americas (AMTA) and the European Association for Machine Translation (EAMT), come under the umbrella of the International Association for Machine Translation (IAMT). IAMT publishes MT News International, which appears every three months and is distributed to the members of all the IAMT regional associations around the world. At the same time, AAMT independently issues the AAMT Journal every three months. The latter bulletin is for all AAMT members. AMTA and EAMT have no such bulletins at present.

The AAMT Journal is printed in Japanese, and there is a digest available in English for members outside Japan. The English version contains shortened versions of selected articles from the original Japanese. Members in Japan receive only the Japanese bulletin, while both the Japanese and English versions are sent to members who are based overseas.

The English publication carries articles selected from the Japanese version that have undergone the process of Japanese-to-English (J-E) machine translation, followed by necessary postediting. Since the bulletin is for the members of an MT association, our policy is to preserve and reflect as much of the MT output as possible. Thus, there may be some problems in the quality of the English sentences. However, we expect that this experience could lead to further improvement in the performance of MT over the years to come.

As their respective titles imply, MT News International and the AAMT Journal are based on different concepts. As its name indicates, MT News International is essentially a newsletter. Its primary focus is recent news on machine translation. It enables members to keep in touch with trends in machine translation around the world.

MT News International contains many accounts reprinted from the AAMT Journal. In this way, the world is kept informed of the status of MT in the Asian and Pacific regions. It is possible that some articles might appear in all three publications (AAMT Journal, the English digest of AAMT Journal, and MTNI). When reprinting accounts from the AAMT Journal, the editors of MTNI make selections at their own discretion. AAMT is not involved in this process. These editors also revise the J-E machine translations that appear in the English version of the AAMT Journal to make them more fluent. AAMT is not involved in this process, either.

Since the AAMT Journal is the bulletin of AAMT, the editors are committed to making the contents significant and useful for all AAMT members. It is especially intended to include more articles for MT system users. But this is by no means an easy task. We strongly feel the need for further efforts.

The membership of AAMT may be divided roughly into MT system users, MT system developers (including vendors), and MT system researchers. While most of the association's members are in Japan, there are several who are not. We will continue to provide valuable, impartial information for the members in various positions and with different objectives.

The AAMT Journal is edited and published entirely with voluntary contributions. The Editorial Board provides a forum for discussions about policies related to editing and publishing the AAMT Journal. Because of the lack of paid staff, the Board relies heavily on volunteers for help in handling various tasks. The Editorial Board is currently composed only of members who are concerned with MT research and development. We hope to make the Board more functional by expanding it to include MT users.

The Editorial Board looks forward to receiving contributions from members for publication in the AAMT Journal. Contributed articles should be useful to members of the MT association. One can gain a reasonable idea of how to prepare a contribution by reading the articles that have been printed so far in the Journal. Reports of hands-on experiences with specific MT systems are particularly welcome. Opinions and requests are also welcome, as are notices of special events.

As a rule, we require the members' contributions to be prepared in electronic form and accompanied by hard copy. Each article should be a standard text file (i.e., one that can be read on any personal computer or workstation). We cannot accept electronic files in specific word-processing formats. The text file should be sent to the Board on a floppy disk or via e-mail, and the corresponding hard copy should be mailed or faxed. Charts and pictures should be monochrome and attached to the hard copy, and the data file must contain a clear indication of where they go in the document. When a contribution is accepted and published in the AAMT Journal, its layout is left to the discretion of the Editorial Board, although authors' specifications with regard to the arrangement of

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People

Introducing Hozumi Tanaka

Hozumi Tanaka, president of the Asia-Pacific Machine Translation Association and now president of the International Association for Machine Translation, was educated in Tokyo. He earned his bachelor's degree in engineering in 1964, his master's in engineering in 1966, and his Ph.D. with specialization in automatic control and computer science in 1980 from the Tokyo Institute of Technology.

Working for the Electrotechnical Laboratory, Dr. Tanaka was one of the key figures in planning the famed Fifth Generation Computer Project. He is currently a professor in the Department of Computer Science, School of Information Science and Engineering, at the Tokyo Institute of Technology.

Dr. Tanaka's research and teaching interests include artificial intelligence, especially the field of natural language processing, machine translation, and speech recognition. He has developed a new probabilistic GLR parsing method, based on which he is engaged in building various NLP application systems.

Conference Reports

Coling-ACL'98 Attracts Large Turnout

The combined 17th International Conference on Computational Linguistics and 36th Annual Meeting of the Association for Computational Linguistics, held at the University of Montreal on August 10-14, 1998, brought together nearly 800 participants from all countries outside the Americas. More than 300 came from countries outside the Americas. A full list of participants has been posted on the Conference Website (see below). The joint conference, hosted by the RALI Laboratory (Laboratoire de Recherche Appliquée en Linguistique Informatique) in the University's Department of Computer Science and Operations Research.

Program Chair Christian Boitet and co-chair Peter Whitehead put together an impressive program of tutorials, invited papers, regular papers (in four parallel sessions), panels, project notes, student sessions, and post-conference workshops. Of special interest to MTists was the EAGLES Panel on Lexical Semantic Standards for Machine Translation and Information Systems, coordinated by N. Calzolari and A. Sanfilippo with panelists S. Ananiadou, F. Busa, R. Gaizauskas, and S. Montemagni and discussants R. Grishman, M. Palmer, J. Tsujii, and R. Zajac. The complete program is posted on the Website.

In the face of such a vast array of offerings, it was difficult to draw many generalizations, but Bente Maegaard, Director of the Center for Språk- teknologi Njalsgade in Copenhagen and active member of EAMT, ventured the following general observations:

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"I came back from Montreal with two major impressions. The first is that large resources are now really being used and compiled. Several large lexicon projects are now more than just plans and wishes. People run tests using large resources. For example, we saw the Frame-net and Mindnet demos. There was a Euroworknet workshop, etc.

"My second general impression was that there were many proposals for the integration of rule-based and statistically based methods. I mean real integration. There is no doubt to me that this is one of the ways we will develop the field, and it was very promising to see all these proposals. The methods are being used for better parsing, better text alignment, etc.

"Both these trends are good news for our field, as they will both lead to better tools, better MT, and better tools for translation memory and alignment."

Further information: www-rali.iro.umontreal.ca:COILING-ACL98/. Questions, comments, suggestion: coling-ae198@iro.umontreal.ca.

ATMT-98 Looks at MT Amid Growing Field of Language Technologies

This issue of MT News International went to press on the eve of ATMT-98, which was held on October 28-31 at the Sheraton Bucks County Hotel in Langhorne, Pennsylvania, in cooperation with the University of Pennsylvania. This third conference in ATMT's biennial series was convened by Eduard Hovy, ATM President and General Chair of the Conference, whose team included Laurie Gerber and David Farwell, co-Program Chairs, and Martha Palmer, Local Arrangements Chair.

A full report on the conference will appear in the next issue of MTNI.

Further information: www.isi.edu/natural-language/ATMT98.html.

Translating and The Computer 20
London, November 12-13, 1998

This year’s “Translating and the Computer” marks the 20th anniversary of this two-day conference series. Organized, as usual, by the Association for Information Management, it is also co-sponsored by the Institute of Translators (ITI), the British Computer Society (BCS), the European Association for Machine Translation (EAMT), and the International Association for Machine Translation (IAMT). It is being held at One Great George Street, Westminster, London, SW1.

The key issues being addressed are:
- Evaluating MT Systems;
- Improving Translation at the Source: Controlled Authoring and Author Memory;
- How to Make MT More User-Friendly;
- Machine Translation Trends in Europe and Japan;
- How to Organize a Translation Service to Maximize Efficiency;
- Relocating MT in Education and Training;
- How Companies have Customized Current MT Systems.

The organizers have made a special effort to include contributions from actual users of the program, which also features a number of papers from both developers and users showing new developments or applications.

The speakers on the first day are include Tony Hartley of the University of Brighton; John Hutchins, President of EAMT; Ian Jones of Supreme Headquarters Allied Powers Europe (SHAPE); Pascaline Merten of the Haute Ecole de Bruxelles/ISTI; Ruslan Mitkov, University of Wolverhampton; Dawn Murphy of Multilingual Technology Ltd. UK; Jeannette Orsted of the Danish Association of Business Language Graduates; Chris Pyne, International Communications, Europe, Germany; Klaus Schubert, Fachhochschule Flensburg; Dorothy Senez of the European Commission; Dimitris Theologis of the European Commission; and Michelle Vanni of the U.S. Department of Defense.

On the second day the presenters are Sophie Anamandou of UMIST; Christian Grassnick of SAP/Germany; Kaarina Hyvonen of Kieltokou Ltd.; Steve McLaughlin of Lernout & Hauspie; Jorg Schuetz, Institute of Applied Information Sciences, University of Saarbruecken; Svetlana Sokolova of Project MT Ltd.; Olaf-Michael Stefanov of the United Nations; Klemens Waldhor of EP Electronic Publishing Partners; and a representative of Logos Corporation.

One may attend both days, either day separately, or half a day. Members of ASLIB, ITI, BCS, EAMT, and IAMT are granted a discount on the registration fee.

Further information: www.aslib.co.uk. Contact: Barbara Hobbs, e-mail: barbarah@aslib.co.uk.

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Forthcoming Events

MT Summit VII

**Singapore, September 13-17, 1999**

The seventh Machine Translation Summit, organized by the Asia-Pacific Association for Machine Translation (AAMT), will be held at Kent Ridge Digital Labs on the campus of National University of Singapore from on September 13-17, 1999. MT Summit VII, which is the last conference of the 20th century in the premier series of conferences on machine translation, will provide a forum for discussing the prospect of MT and related areas in the coming century.

MT Summit VII will feature an expanded program including research papers, reports on users' experiences, discussions of policy issues, invited talks, panels, exhibitions, tutorials, and workshops. AAMT invites all who are interested in any aspect of machine translation—researchers, developers, providers, users, and watchers—to participate in the conference.

**Conference Schedule**

Tutorials will be held on Monday, September 13; the conference proper, including papers, panels, and exhibits, will take place on September 14-16; and there will be post-conference workshops on Friday, September 17.

**About the Venue**

Kent Ridge Digital Laboratories (KRDL) is a national applied research & development organization established in January 1998 through the merger of former national IT institutes—namely, the Information Technology Institute (ITI) and the Institute of Systems Science (ISS). With a diverse team of more than 400 research scientists, KRDL's aim is to be the premier research and development organization in Asia-Pacific for information and networking technologies.

**About Singapore**

Singapore is a vibrant, sophisticated city state of 3 million people, offering the best of modern facilities and comforts while retaining her heritage and culture. A progressive, cosmopolitan city, Singapore lies at the crossroads of Asia. Its Changi International Airport is said to be the best airport in the world. Known for its food and shopping, Singapore is a thriving nucleus for tourism, trade, and finance. The climate is tropical all year round, with high humidity and temperatures ranging between 23°C Celsius (74°F) in the evening to 32°C Celsius (90°F) during the day. Showers are sporadic and heavy but also brief and refreshing. Light summer clothing may be worn throughout the day.


**Conference Organization**

General Conference Chair Hozumi Tanaka, Tokyo Institute of Technology heads a conference organization team that includes Local Organizing Committee Chair Hwee Boon Low and Local Organizing Secretary, Victorie Chen-Toh, both of Kent Ridge Digital Labs, Singapore; Program Committee Chair Jun-ichi Tsujii, University of Tokyo and UMIST; and Vice Chair Loong Cheong Tong of Kent Ridge Digital Labs.

The Program Committee members are Virginia Cha (Singapore), Jason S. Huang (Taiwan), ZhaoXiong Chen (China), Key-Sun Choi (Korea), Robert Dale (Australia), Zhendong Dong (China), Dominique Estival (Australia), Changning Huang, Tsinghua (China), Hitoshi Iida (Japan), Etsuo Ito (Japan), Hirooyuki Kaji (Japan), Shin-ichiro Kamai (Japan), Asane Kawtrakul (Thailand), Kunio Matsui (Japan), Se Young Park (Korea), Wanchai Rivepeboon (Thailand), Trihono Sastroharto (Indonesia), Youlwon Seong (Korea), Keh-Yih Su (Taiwan), Chew Lim Tan (Singapore), Benjamin K. Tsou (Hong Kong), Dekai Wu (Hong Kong), and Yusof Zahir bin (Malaysia).

The International Advisers are Launie Gerber, SYSTRAN Software, Inc. (USA); Eduard Hoyt, USC Information Sciences Institute (USA); John Hutchins, University of East Anglia (UK); and Antonio Sanfilippo, LINGLINK (Luxembourg).

**Call for Papers**

MT Summit VII seeks original papers on all aspects of machine translation. Topics of interests include, but are not limited to:

- Methodologies for MT (rule-based, knowledge-based, analogy-based, statistics-based, etc.);
- Practical MT systems (MT for professional translation, MT for the Internet, MT for localization, etc.);
- Translation aids (translation memory, terminology databases, etc.);
- Speech and dialogue translation;
- Natural language analysis and generation techniques;

*Continued on next page*
- Dictionaries and lexicons for MT systems;
- Text corpora for MT and knowledge extraction from corpora;
- Human factors in MT and user interfaces;
- Evaluation techniques;
- Standards in text and lexicon encoding for MT;
- Cross-lingual information retrieval;
- MT and related technologies (information retrieval, text categorization, text summarization, information extraction, etc.);

There will be three categories of papers:

**Research papers.** Submissions are invited for reports of significant research results in any aspect of machine translation and related areas. Such reports should include a substantial evaluative component. Papers should be in English, not longer than 5,000 words.

**System presentations.** Submissions are invited for reports on the design, implementation, operation, and evaluation of operational and prototype systems. Reports should be in English, not longer than 2,000 words.

**User studies.** Submissions are invited for reports on users' experiences with applying MT to some task, evaluation of MT systems, analysis of MT markets, etc. Reports should be in English, not longer than 5,000 words.

All types of papers should be submitted to the address below and must be received by the date indicated. The papers should include a cover page with the following information:
- Paper title;
- Author(s)' name(s), affiliation(s), address(es), and e-mail address(es);
- A 200-word abstract;
- For research papers: up to 5 keywords;
- For system presentations with demos: the phrase “System Presentation with Demo,” together with the hardware, software and network requirements for the demonstration;
- For user studies: the phrase “User Study.”

Please mail 4 hard copies of the paper to:

**MT Summit VII**  
Asia-Pacific Association for Machine Translation (AAMT)  
3F, Shiba-Koen Sanada Bldg. 3-5-12 Shiba-Koen, Minato-ku, Tokyo 105-0011, Japan

In addition, please submit an ASCII version of the cover page electronically to: aamt0001@infotokyo.or.jp.

**Important Dates**

April 15, 1999:  
Deadline for submission of paper

May 30, 1999:  
Notification of acceptance

July 15, 1999:  
Deadline for final camera-ready copy

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**Call for Tutorial Proposals**

Proposals are solicited for tutorials on both technological and practical issues in machine translation. Submissions should be made to the Local Organizing Chair at hweeboon@krdl.org.sg by November 30, 1998.

These proposals should include (1) the length of the tutorial (either a half day or full day); (2) an outline of the tutorial; (3) the intended audience (introductory, intermediate, advanced); (4) complete contact information for the contact person; and (5) brief biographies of the presenters.

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**Call for Exhibits**

In addition to the scheduled system presentations with demos, vendor booths will showcase commercial products ongoing basis throughout the conference. Exhibits will not be restricted to machine translation systems but may include a variety of NLP applications.

If you would like to exhibit, please contact the Local Organizing Secretary at vicky@krdl.org.sg by April 15, 1999.

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**Call for Panel / Special Session / Invited Speaker Proposals**

Submissions are invited for panel sessions dealing with significant, controversial, and timely issues in machine translation. Proposals should include the description of the topic, and preferably the names and affiliations of panelists who could represent diverse positions or approach to the topic. Proposals for special sessions and invited speakers are also welcome.

These proposals should be sent to the Program Committee Chair at MT-SUMMIT-99-Sessions@mlist.com.cl.nec.co.jp by November 30, 1998.

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**Editor's note:** The next issue of **MT News International** will include the second call for papers with further details.
Publications

Le Journal

The editors of Le Journal: The Record of Human Language Technologies announce that their publication can be accessed on-line at www.linglink.lu/lejournal.

Applying technology to solve problems is the focus of Le Journal. This new e-journal will inform you of the latest, where innovation meets the market needs. Highlighting the application of LT and related business opportunities, Le Journal intends to provide new insight for developers and marketers of language-enhanced products and services.

There is a button on the home page for comments from readers.

Further information: Julie Ellis. Production Coordinator, tel/fax: +44 (0) 342 327 709.

Lingualizer Localization

The e-zine Lingualizer Localization is sent free of charge to approximately 12,000 language professionals in the translation and localization industry in over 20 countries. It is distributed using Firebird Group Mail (www.firebird.net) and published by the Irish localization consultants, Avalon Technologies.

Language Lingualizer accepts the following types of contributions: press releases (maximum 2 per issue), service ads (maximum 5 per issue), tools vendor articles (maximum 2 per issue), job ads (maximum 15 per issue).

Further information: www.lingualizer.net, or write to Editors, Lingualizer Localization News, editors@lingualizer.net; advertisers, please send email with the word “Advertising” on subject line to advertising@lingualizer.net. Avalon Technologies Ltd., P.O. Box 1, Arklow, County Wicklow, Republic of Ireland.

Publications Received

Journals

Most recent issues received:
AAMT Journal no. 23, July 1998 (in Japanese only); Computational Linguistics vol. 24, no. 3; ELRA Newsletter vol. 3, no. 3 (August 1998); Elsiens vol. 7, no. 3 (July 1998); Language International vol. 10, no. 4; Language Today no. 12 (September 1998); LISA Newsletter vol. 7, no. 3 (September 1998); Literary and Linguistic Computing vol. 13, no. 2 (June 1998); Localisation Ireland vol. 2, no. 2 (May 1998); Machine Translation vol. 12, no. 4; Machine Translation Review no. 7 (April 1998); Multilingual Computing & Technology vol. 9, no. 5. — JH

Attention is drawn to the resolution of the IAML General Assembly, which asks all members to send copies of all their publications within one year of publication. Items for inclusion in this section should be sent to the John Hutchins (see coordinates on page 2).

Jobs

Microsoft WPG / Ireland

We are hiring more smart people in 1998. Check out our web pages for current employment vacancies.

Further information: www.microsoft.com/ireland/hr/wpgi/default.htm.

Méta4 / Spain

Challenging positions are available in the Localization Department and the Terminology and Translation Center at Méta4, international developers of top end Payroll and Human Resource applications, in their Madrid headquarters. Applicants must be willing to relocate to Madrid.

Terminologist/Editor (Native US). The position requires knowledge of Spanish and good knowledge of terminology in the some or all of the following subject areas: relational databases, object-oriented technology, client/server architecture and applications, data modeling, the Microsoft product suite, casetools, human resource, and payroll applications. Should also have experience using translation memory and machine translation software; familiarity with maintaining terminology databases, excellent editorial skills; and experience defining new terminology.

Translators, Spanish to US English (3 positions) These positions are for native speakers of US English with a high level of proficiency in Spanish (preferably bilingual or near-native proficiency in standard Castillian Spanish) and experience using terminology in the some or all of the following subject areas: relational databases, object-oriented technology, client/server architecture and applications, data modeling, the Microsoft product suite, casetools, human resource, and payroll applications. Experience using translation memory, machine translation software, and desktop publishing systems (preferably FrameMaker) highly desirable; also experience translating information such as guides, on-line help and dealing with software localization issues.

Translator, Spanish/English to German (1 position). This position is for a native speaker of German with high level of proficiency in Spanish and English and experience using terminology in the some or all of the following subject areas: relational databases, object-oriented technology, client/server architecture and applications, data modeling, the Microsoft product suite, casetools, human resource, and payroll applications. Experience using translation memory and machine translation software highly desirable; also experience translating information such as guides, on-line help and dealing with software localization issues.