# **Translation, the Internet and standing still**

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## SOME INTERNET AND E-MAIL BENEFITS FOR TRANSLATORS...

- a. Bypass the postal service; e-mail is "open" 24 hours a day every day for you to receive and send work. Your mail will be stored in your electronic mailbox until you collect it.
- b. You and your customer can receive and despatch your work wherever you or your customer may be in the world. By using Telnet, one of the Internet services, you can log onto your e-mail account from anywhere in the world. Access to your account can be through almost any computer which is capable of connecting with your access provider.
- c. It is cheap and easy to do work directly, using the Telnet service, on your customer's computer from wherever you may be in the world to wherever your customer may be in the world.
- d. Allows easy, direct access to your customer's on-line style books, reference material and personnel. You can also "talk", using interactive typing, with a colleague. Voice systems for real conversations over the Internet do exist but only one person may speak at a time and the audio quality is not as good as that of conventional telephones. Both speakers must have the same software and equipment installed and running at the time.
- e. Is a rich, worldwide information resource. Of course, there are book libraries in their millions but for The most part it is hard to gain access to a book because of the restraints of distance, cost and available time. Such restraints hardly apply to the growing information resources on the Internet.
- f. You have access to other translators and language specialists who will often be able to help you solve a problem such as explaining a meaning or providing a literary reference. You might like to help others too.

I shall attempt in my talk to describe these various aspects and to suggest how they might be relevant and useful to translators.

My guess about how translators do their work is that they require as an absolute minimum a head full of knowledge about their chosen language pair and the ability to listen to prose in the source language and then to recite a fair translation in the destination language.

Whatever form the actual translation process may take, there must be literally thousands of variations of the means of delivering a source text to the translator's eyes, ears or finger tips (in the case of Braille) and then receiving the destination text from the translator's hands (typing, writing) or mouth (speech).

We use the telephone and are accustomed to speaking to people who might be almost anywhere in the world. The Internet is a worldwide automatic telephone system for computers. It comprises several million computers and they are linked by wires, fibre-optic cables and satellite links.

E-mail, which is, incidentally, not exclusive to the Internet, can deliver text, pictures and sound very quickly and easily. E-mail is an alternative to translation delivery systems such as dictation, courier services, postal services, telex, facsimile, video, and personal computer-to-computer links via the telephone. By its ability to automatically deliver to several addresses at the same time it replaces even the photocopier. Whether you will benefit from using e-mail is highly subjective and depends upon a balance of the dictates of convenience, cost and customers, ie. those nice people who pay you to translate.

The Internet is not just about e-mail. It is also a vast, self-indexing library of libraries which contain subjects so varied and so intertwined as to test the limits of taxonomy itself. It is a system which makes easy and quick the finding and receiving of texts which may be located anywhere in the electronic book stacks and electronic filing systems of the world. It is a forum where communities of like interest may meet, where questions may be asked and answers received. Resources of all sorts are being added to it every day.

If you are considering an e-mail or Internet account then I strongly urge you to buy, borrow or at least examine a comprehensive directory of what is available. One or two Internet magazines would also be useful.

The cost of equipment may be a lot less than you think. Of course, the specification of a computer suitable for accessing the Internet will depend upon your expected requirements. If you need to send and receive text documents, ie. no pictures, diagrams or sound, then a simple system will amply suffice. If you do technical or scientific translating and need to receive diagrams and illustrations then your computer will need to have more features.

A simple, second-hand computer, printer and modem will deliver e-mail plus most of the Internet's resources for under GBP 100; the parts of the Internet which it may not be able to handle have to do with type founts, line graphics, coloured screens and sound and these may not be important in your work. A new system (486 computer, fax modem, mono matrix printer) capable of doing everything costs from around GBP 700 including VAT, (October 1995). The cost of telephone charges is often seen as a forbidding aspect of going on-line. I try to compare telephone charges with the cost of any alternatives, such as going to visit a person for a discussion, writing a letter or sending a packet via a courier. The alternative costs of time, paper, packaging, postage, transportation, food and even hotel accommodation can make telephone charges seem very small indeed.

Some technical knowledge would be useful but is not essential. Obviously one should be able to operate a computer. Contemporary software hides much of the technical side of e-mail and Internet access. Even so, a little technical knowledge may save you a lot of money in call-out charges and disruption to your work schedule. Knowledge of computer jargon should not be a problem; it is after all, just another specialist language.

Translators are accustomed to dealing with natural languages. Dealing with computers is not much different, except that the computer's grammar and lexicon are tiny in comparison to those of natural languages. If you can translate from one natural language into another, then you are overqualified to deal with a computer! As translators, you are accustomed to speak and write using correct grammar and spelling, and you are especially alert to mistakes, so perhaps you will find it easier to operate a computer than non-translators.

I think that the Internet, at least at the present stage of development, provides a benefit to translators which is largely to do with the ease and speed of sending documents to and fro.

The means of sending paper-based documents via the postal system is long-established, reliable and predictable to a high degree. Bringing the existence of a translator to the notice of a potential customer is also long-established, vide advertisements in specialist journals and mass-market publications or via translation agencies or trade directories such as "Yellow Pages".

E-mail reduces the time required for transmission of a document between sender and receiver to a negligible few minutes or less. Documents may be transmitted between any two computers which are connected to the telephone system. E-mail is not necessary for this process. It may cost more in telephone charges to set up a dial-up link than to use e-mail but the costs should be compared with those for postage and packing, and e-mail subscription service charges which are likely to be greater than your consequent telephone charges.

### DOCUMENT TRANSFER USING TWO COMPUTERS

The computers may be anywhere in the world. They are attached via modems to the local telephone system. As long as the modem and software of the one can successfully log onto the software and modem of the other, it does not matter what makes of computer and operating system are connected. Call charges are at the rate applicable locally.

The translator's computer runs an ordinary communications program.

If the distant computer is intended to run unattended then it should run a program called a bulletin board. This will answer the call from your computer and allow you to log onto the system. You can upload and download files without the operator of the distant computer being present.

Alternatively, the computers at both ends could run an ordinary communications program. You arrange for your computer to make a call to the distant computer in the knowledge that the operator of the distant computer will let its modem answer your call. You can then upload or download files.

### **CHOOSING AN ON-LINE ACCESS PROVIDER**

Costs and costing methods vary from company to company: a., fixed fee plus unlimited time online, b.. fixed fee plus charge for time spent on-line. c.. dial-up access via a premium rate telephone number. Some services may additionally require you to pay each time you look at their data.

Some firms offer a number of "free" hours of on-line time; if you use up your "free" allocation then you pay for the additional time used. Unused "free" time cannot be carried over into the next monthly period. Where a charge is made for on-line time it may vary depending upon the time of day.

The fixed fee will be determined by the services which you want. Usually the basic service offers e-mail access alone. Full access includes services such as Usenet, gopher, veronica, archie, world wide web, etc.

A method of payment by customer which is favoured by access providers is for the customer to sign an unlimited mandate allowing the access provider to debit his/her credit card account each month with whatever they calculate the liability to be.

Telephone call charges cost extra. You should ensure that your chosen access provider has a telephone number, or Point-of-Presence (POP), which is within local call range. UK access providers invoice in sterling while Compuserve is invoiced in USA Dollars converted to sterling.

Changing from one access provider to another is very easy but your e-mail address cannot be transferred. A "lifetime e-mail address" is not yet available.

# DATA TRANSMISSION TIMES AND COSTS

This is only a guide as to the duration and telephone cost of sending a file via some kind of computer-to-computer link, including e-mail. The total time will involve logging onto and logging off the access provider's computer. I have assumed an average word length of seven characters; the intervening spaces also have to be transmitted. Telephone costs assume local daytime call rates in South East England, approximately.

Transmission in seconds	1200 baud	2400 baud	4800 baud	9600 baud	14400 baud	28800 baud
A letter	15	8	4	2	2	1
A short article	300	150	75	38	25	15
A 400 page book	8808	4404	2202	1101	734	367

Transmission cost in pence	1200 baud	2400 baud	4800 baud	9600 baud	14400 baud	28800 baud
A letter	5	5	5	5	5	5
A short article	25	15	10	5	5	5
A 400 page book	735	370	185	95	65	35

### ENSURING ACCURATE TRANSMISSION OF DATA

A text file, an image or audio may be accurately transmitted between computers over the telephone system, even if the data is corrupted by static or "noise".

The data is transmitted in standardised blocks or groups of bytes. Each byte has a numerical value, A=65, B=66, etc. The numbers for all the bytes in a block are added together and the result is called a checksum. The transmitting software calculates a checksum for each block before sending it.

When the block arrives at its destination, the receiving software also calculates a checksum. If the checksums do not match then the block is transmitted again. If the two checksums do match then the next block is transmitted.

# SENDING AND RECEIVING MIXED DISK AND FILE FORMATS

A very simple and inexpensive way of receiving a file from your customer is for the customer to copy the file onto a floppy disk and then send the disk to you via the postal service.

The success of this method is based upon two assumptions: a., that your computer system will be able to read a floppy disk from your customer's computer, b.. that your word-processor program will be able to interpret a file prepared with your customer's word-processor program.

The pitfalls of the first assumption, ie. regarding floppy disk compatibility, are as follows. The appearance of a floppy disk can be very misleading. Unlike audio cassettes, which can be played and recorded on almost any audio cassette player, excepting of course, Walkman-type devices which only play, a floppy disk can only be used if the disk drive and computer operating system are appropriate to its technical specification.

The now ubiquitous 3.5" floppy disk may fit into the disk drive of different computers but whether it can be read or written to will depend upon many technical factors. A disk prepared on an IBM-compatible PC cannot be read by an Apple Macintosh and vice-versa. Even if the disk was pre-

pared on, say, a PC, its capacity may exceed the technical specifications of the disk drive on another PC.

If your customer uses an Apple Macintosh and you use a PC computer then you will have a problem of incompatibility. There are firms which undertake to copy the data from one format of floppy disk onto almost any other disk format. Costs start from about twelve pounds per disk and are on a quick turn-around basis.

This is not really a good solution for every time you wanted to send or receive a disk you would need to use the conversion process. It would involve costs and a delay of a couple of days to allow for two postal deliveries each time.

The simplest solution to this incompatibility problem is to use e-mail. If your computer and modem can log onto an e-mail access provider then you can send and receive files. It makes no difference what your computer is, how old it is, what kind of floppy disk it uses. You don't even need a hard disk. Your computer system will be compatible with the e-mail access provider and your customer's computer system will also be. You do not need to find out any technical details about your customer's computer.

You send your file via e-mail. Your customer receives the file and downloads it into his/her computer. That's all! It is very much quicker than the postal service and it bypasses a lot of technical problems.

While a hard disk is extremely useful, if you have an older computer which has only a floppy disk drive you can easily download or upload files directly to or from the following kinds of disk: 5.25" floppy disk, 3.5" floppy disk, 3" floppy disk.

The second assumption, ie. regarding word-processor compatibility, could be resolved by buying a copy of the word-processor used by your customer. If you have many customers, each with a different word-processor, then you will have to invest a lot of money, not only in software, but in the time needed to become competent in the use of that software.

Different word-processors have various ways of encoding text. This assumes that the text is likely only to be edited or printed and is not likely ever to be interpreted by a different word-processor. A text is stored both in memory and on disk as a series of numbers. Some of the numbers are interpreted by the word-processor to represent the end of a line, the end of a page, the end of a document, the type font, instructions to the printer, details about margins, etc. An encoded document thus contains more numbers than those relating to the text alone.

A code number must be interpreted in context and contexts vary from program to program. One solution to this is to either originate a file as an ASCII text file or to convert it to that format. ASCII is a long-established format and if used should present no problems. Many word-processors have a facility which can convert a file into ASCII format.

However, if a file contains special and accented characters, for example, in translating between Swedish and French, then a conversion into ASCII format will convert special and accented characters into ordinary unaccented characters. Your customer's text may not be capable of being interpreted by your word-processor.

Another possibility is that both you and your customer may be using different word-processors to edit files having the same format. You will need to check whether this will lead to any problems.

If a job requires you to attend to page layouts and typographic matters including, say, special language characters, mathematical, chemical or engineering symbols then ASCII will not suffice. You and your customer will have to decide upon which word-processor program and document format to use.

# **REFERENCE BOOKS AND MAGAZINES**

There are hundreds and possibly thousands of books and magazines about the Internet and its services. Each person will have a preference and here I am no different. My shortlist is as follows:

a.. book: Internet Golden Directory 1995, pp 812, ISBN: 0-07-882107-X. UK price: GBP 22.95. It lists thousands of online services together with brief descriptions of each. Its contents pages list subjects under headings and subheadings and are augmented by an index. There is a comprehensive list of Usenet newsgroups.

b.. book: Cultural Treasures of the Internet, Michael Clark, pp 313, ISBN: 0-13-209669-2, UK price: GBP 19.95. The first hundred-odd pages describe the various Internet services and how to use them to search and retrieve. The remainder of the book lists resources in the Arts and Humanities. Eleven pages are allocated to the contents pages and there is an index, also of 11 pages. The author is Professor of English and Associate Dean of Humanities at Widener University, Pennsylvania, USA. The author's non-technical prose makes the how-to-do-it section easy to grasp.

c.. book: Multilingual PC Directory: This book is a copious source of information about software, word-processors, fonts, suppliers' addresses, Internet resources, etc. ISBN: 1-873091-03-5. There is also an electronic version in Windows Help File format, available for downloading from from Compuserve's Foreign Language Forum (GO CIS:FLEFO) in the file MPCDIR.ZIP, and also from the site: http://knowledge.co.uk/xxx/. E-mail: 72240.3447@compuserve.com.

d... magazine: Given their ephemeral nature and often breathless prose these are hard to evaluate but 'Internet' (UK edition published by EMAP), ISSN 1355-6428, for October 1995 contained extensive lists of Internet access providers in the UK, World Wide Web sites and Cybercafes. Similar material is published in different magazines from month to month and a perusal of various magazine contents pages is likely to lead to useful and interesting finds.

#### CYBERCAFES

In September 1995 there were some 24 Cybercafes which, together with a handful of public libraries and bookshops, were offering walk-in Internet access in the United Kingdom. There are no formalities beyond paying a fee for the use of the computer equipment; about GBP 2.50 - 3.00 for thirty minutes of on-line time.

One can log on to one's existing account using Telnet, send e-mail even if one does not have an account, or just browse. All the Internet's services are generally available. Examples in London of such services are Cyberia at 39 Whitfield Street, WI, and Dillons Bookshop, Gower Street, WC1.

The Cybercafes really do offer coffee and cakes in addition to Internet access. If you want to learn at a fairly low cost then a Cybercafe is a good place to try. Get more details from: http://www.emap.co.uk/comp/magazines/internet/

#### A SHORT LIST OF INTERNET RESOURCES

There are many thousands of Internet resources but not all are likely to be of immediate and obvious interest to translators. The following have to do with language, linguistics and translation matters generally.

The books referred to elsewhere should provide a lead to finding out about subjects which might be important as background information in a translation job.

Usenet newsgroups:

sci.lang

natural languages, communication, etc.

sci.lang.translation	problems and concerns of translators			
comp.ai.nat-lang.	natural language processing by computer			
The FAQ for this newsgroup is a good source for translators and linguists alike.				
comp.ai.nlang-know-rep details of conferences, meetings				

comp.software.international finding, using and writing non-English software

comp.fonts typefonts design, use, conversion etc.

You can download a list of all newsgroups by anonymous FTP from rtfm.mit.edu/pub/. Not all the newsgroups may be available via your access provider. Many newsgroups are dormant or empty. FAQ's (Frequently Asked Questions, and answers, give information about the newsgroup) are posted regularly. You can also download FAQ's for the newsgroups from: anonymous FTP: rtfm.mit.edu/pub/usenet/news.answers/index gopher: gopher.gdb.org/Usenet News and FAQ's

Listserv: Only a basic e-mail account is needed to receive material from the following services. A message e-mailed to the 'listserv' address will be forwarded to all subscribers should you wish to contribute. Commands and names may be case-sensitive.

To subscribe, send e-mail to the 'subscribe' address as follows: leave the subject line blank and send this one-line message ... subscribe listname your\_forename your\_surname for example:

subscribe elsnet roger harris.

Subscribing to a list is usually processed automatically and does not involve any additional payment. When you apply to subscribe, your subscription confirmation will include instructions on how to unsubscribe or signoff. You will also find directions about getting a file of search instructions for using e-mail to search the listserv databases.

listname: COLIBRI subject: Language, logic and speech

listserv: send message 'help' to 'subscribe' address for details subscribe: colibrirequest@let.ruu.nl

listname: ELSNET subject: European Language and Speech Network listserv: elsnet-list@let.ruu.nl subscribe: dawn@cogsci.ed.ac.uk http:// www.cogsci.ed.ac.uk/elsnet/home.html

listname: LANTRA-L subject: All aspects of translation and interpreting of natural languages listserv: lantra-1% finhutc.bitnet@cunyvm.cuny.edu subscribe: listserv% finhutc.bitnet@cunyvm.cuny.edu

listname: LINGUIST subject: Linguistics listserv: linguist@tamvml.tamu.edu subscribe: listserv@tamvml.tamu.edu

listname: SALT subject: Speech and Language Translation listserv: salt@cstr.ed.ac.uk subscribe: salt-request@cstr.ed.ac.uk

I should like to end by giving the WWW address of Aslib which has organised this conference: WWW: http://www.aslib.co.uk/aslib/