

Translation and Technology:
Bridging the Gaps

Edwin Gentzler

Translation and Technology: Bridging the Gaps

The skills required of translators have changed dramatically in the last few years; what once was primarily a linguistic activity has evolved into a complex practice requiring both advanced language and computer skills. This presentation covers a range of technologies, providing practical information on how they can help the translator to translate faster and more accurately and to transition to the changing market. I will first look at the changing nature of the profession, which appears to be the place of an increased number of demands on the translator (for no extra pay). I will then discuss a course we have developed at the University of Massachusetts Amherst to help bridge the gap between the new demands of the marketplace and traditional translation training programs. I will next review a number of basic computer tools for the translator, including multilingual word-processing, desktop publishing, Internet codes, communication tools, translation dictionaries and databases, machine translation, and Internet discussion groups. Finally, I will conclude suggesting that all these changes may in the long run have a positive impact on the translation profession; rather than being viewed as a technical scribe, translators will become more involved in the final production of texts. This new status is empowering and will have repercussions in increased prestige and pay for practicing translators.

Changing Nature of the Profession

The translation profession is changing quickly, and translators who do not keep up with the evolution in the field are going to be left behind. Seven years ago, when I assumed the directorship of the Translation Center at the University of Massachusetts (founded in 1981), I inherited a pool of approximately 200 translators officially affiliated with the Center. None of them work for the Center now. I gave most of them an opportunity—in fact, coming from Europe at the time, I had no other resources—but for one reason or another, they all eliminated themselves from our pool. Some had inadequate linguistic skills, but others were professors or language instructors at the university. Of these, many had other priorities. Translation was only a secondary interest, and they would always negotiate for extended deadlines. Others turned in first drafts, either not proofreading their work, or if they did, only giving it a superficial proofreading. Still others' work was inconsistent; they would turn in a perfect translation one time, but the next time turn in something they had obviously done at the last minute.

But the biggest problem was their lack of computer skills. For professors who are older, this is perhaps understandable, but for young people trying to enter the profession, literacy in the new translation technology is a must. Translation agencies do not have the time or the cash margin to retype, format, proof, and print the translator's work. Time is money. A graph of some of the changes in the translation profession follows:

Skill	Old	New
Language	Bilingual linguistic competence.	Bilingual linguistic competence; awareness of cultural nuances and local variations.
Knowledge of subject	General subject knowledge preferred.	Specialized bicultural subject knowledge required; advanced degree in area preferred.
Training	Some academic background; some general translation experience.	Advanced degree in modern languages; training in translation desired; extensive experience in subject matter; awareness of targeted audience; certification if possible.
Editing	Agency or press did copyediting, proofing, and formatting.	Translator delivers fully edited and proofed document to agency or press; spell-check and grammar check necessary.
Computer	Typed copy (computer or typewriter) required.	Computer word-processing mandatory; advanced desktop publishing skills, including Internet skills, necessary; terminology databases increasingly valuable.
Delivery	Hardcopy via US mail or personal visit; fax.	Hardcopy and disk via personal visit; mail; FedEx; fax; and, most importantly, sending and receiving email attachments.

It is important to keep up with the changes; as the means of production change, so too does the final product. How we process texts has an impact on what gets said. For example, communication is becoming increasingly visible, with charts, graphics, new and creative fonts, colors, all influencing the message. The technology also impacts the nature of the medium. For example, for many years in Spanish, computers could not put accents on capital letters. Now, because the technology has changed, it is possible to do so, and most Spanish style sheets require accents on capitals.

In addition, what in the past might have been communicated via a personal visit or a business letter now might be communicated in an email. A translator, whose business is cross-cultural communication, needs to be versed in the different means at any given culture's disposal for communication. If a translator hasn't already, he or she will soon be asked to translate a Webpage, a computer software program, or do a video/voice-over. The amount of business correspondence –letters,

faxes, brochures, and business cards— the field translates is diminishing; the amount of Webpages, email correspondence, electronic attachments translation companies translate is correspondingly on the rise.

Technology tools

While translators need not become computer nerds, some of the fundamentals needed include (in the presentation, I hope to demonstrate some of these with online examples):

- **Multilingual word-processing.** Word-processing is changing, and changing as we speak. Translators need to be aware of the various ways to enter accents and diacritical marks, to switch from language to language, to be able to word process accurately in the most needed languages in the culture into which they are translating. While the optimal solution is still not there --many fonts are still incompatible with each other-- certain basics are important, including basic Word commands (for PC: CONT + ' + E = é; for Mac users: _ OPT e = é); ASCII codes (ALT 130 = é), the international character map (Start – Programs – Accessories -- System Tools -- Character Map); and to change the keyboard (Start – Settings -- Control Panel – Keyboard -- Add). If one system won't work to get the accent or mark desired, try another one. What might work in a Word document might not work in an email message. For a good site to learn more about multilingual word-processing, see <http://www.umass.edu/langctr/keyboardhelp.html> . The newest advance in multilingual word-processing is offered by **Office 2000, which** solves many of the international incompatibility of word-processing fonts by offering universal fonts. For example, the font Ariel Unicode MS covers every character in the Unicode standard version 2.1. It contains all European characters, including Russian, Greek, Turkish, plus fonts for Japanese, Korean, traditional Chinese, and simplified Chinese. Most language systems, including the Asian language programs, also work in English systems, including earlier versions of Windows. Finally, Office 2000 supports bi-directional languages such as Arabic, Hebrew, and Farsi. It also has a feature called automatic encoding, which means it can detect the code of a particular document. This is especially helpful, for example, if you get a Chinese file or download a Chinese Internet site, and you do not know how the page was written. By purchasing a separate disk called Microsoft Office 2000 Proofing Tools, you get spell and grammar checkers in 37 languages, well worth the \$79 investment. In sum, Microsoft has finally entered the international word-processing market, including translation, and has come up with a system that allows one program to cover nearly all the possible needs. If you or your company are working in a multilingual environment, especially with lesser-known languages, this tool will connect you to the major clients.

- **Desktop publishing.** Desktop publishing is not that hard and is fun. Most of the programs are much the same and fairly easy to learn. Word is good, Microsoft Publisher slightly better, PageMaker one more notch up. Quark Express

is still commonly used, especially on the Mac. The most important features to learn are, first, to *avoid the space key*. Instead, set tabs or use columns, or better yet, learn how to use the table feature. Tables allow you to arrange text on the page in a creative fashion, you can hide the lines between the table sections if you want, and allow you to center, left or right justify within the columns and rows. Tables also translate well when moving to a Webpage environment, where columns and tabs no longer work. Underlining is now out, for it is generally reserved for email and web addresses. As many companies now post ads, newsletters, rate sheets, and brochures on the web as well as in hardcopy, it is important to write using features that translate easy across platforms. As translations from English to Spanish normally grow between 10% and 20%, it is important to know how to keep facing-page features with a longer text, such as knowing your way around margins, fonts size, and spacing.

- **Internet codes.** Translators do not need to know everything about html codes, but they do need to know enough to know what not to translate. Until the Webpage editors get better, translators still on occasion have the need to go into an html document and read the text, deciphering what is part of the formatting language and what is the text to be translated. (To take a look, open any website, go to the "File" menu and click on "Edit with Netscape Navigator"; when the document comes up, go to the "View" menu and click on "Page Source".) I use a program called Claris Homepage to author Webpages; the Netscape Navigator is fine. New versions of Word allow you to save Word documents as html files, but they often add a lot of garbage commands to a file, and I find many webmasters do not like it much. The Webpage editors will get better and easier in the near future. You will also need to learn how to download files from the Internet, open them with editors, translate, and post them back to either the client's site or your own site. I recommend using the same editor that the client used, or go into the source html code directly and translate the text from there. Finally, you will also need to know the basic html codes for diacritical marks (é = é). The advantage of these codes for "special" characters is that they are universal; all html programs recognize them worldwide.

- **Communication.** The fastest and cheapest way to communicate with a translation agency or a client is email, so open an account and learn how to send material as attachments. Be sure to join a server who can give you a large enough mailbox for large attachments. While words themselves do not take up much space, graphics and pictures do, and clients will want to send you the whole document so you can see the layout as well as text. I also encourage translators working in lesser known languages and translation agencies working in multilingual texts to learn how to use **Adobe Acrobat** and **Adobe Acrobat Reader**. If you want to send a file via an email attachment, and the client does not have the font or language you are translating into, Adobe can pdf the file and embed the font so that the person on the other end can read the text. The Adobe Acrobat Reader is free and can be downloaded from Adobe's homepage, so your client won't have to spend any money to receive your file.

- **Dictionaries.** There are hundreds of computer tools for translators, the most important of which are the dictionaries and online databases, which are getting better everyday. Yahoo has a good reference page on dictionaries (<http://dir.yahoo.com/Reference/Dictionaries>). Another good source is a company called Language Automation (<http://www.rahul.net/lai/glossaries>). I work in German and like the German site (<http://www-math.uni-paderborn.de/dictionaries/Dictionaries>), which also gives links to other dictionaries in other language combinations other than straight English. If you want to help author a dictionary, try helping out the International Dictionary Project (<http://www.june29.com/IDP>) who are updating their lexicons as we write. More specialized dictionaries are being generated; for computer buffs, try Ciber-Léxico Comparativo (<http://www.telefonica.es/fat/lexa.html>).

- **Machine translation.** We at the Translation Center at University of Massachusetts do not really like machine translation. Even the best ones are only 75% accurate, which means that there is a mistake every four words. Type in a sentence such as "Mary had a little lamb". The computer doesn't know if Mary is eating, owning, giving birth, or having sex. That is why we have people translating who have read children's stories and know the cultural context. Machine translation is useful for what we call "gisting" or just trying to understand the gist of any document. If you want to know what a car looks like, its dimensions, color, the size of the engine, you can go to a machine translator and find out some pretty good information. If you want to buy the car and need to sign a contract, then get a human. If you want to just try a machine translation, go to Altavista. Instead of machine translation, I can recommend programs that catalogue all the translations of a particular item in a variety of fields. I like the site **EuroDicAutom** (<http://eurodic.ip.lu/cgi.bin/edicbin/EuroDicWWW.pl>), which is the location of the European Union's database of all documents that have been translated. There you can type in a word in a context of a given field—law, business, finance, etc.—and see how the term has been translated by the EU's translators. You can also call up a number of examples, so you can see how different translators handled the same term. You may search the database in any combination of the EU's eleven official languages. The program gives you the translation plus the cultural context and has become a very valuable resource for translators worldwide.

- **Discussion groups.** Translators need not feel so isolated anymore. It is true that you will spend many hours in front of the terminal, but I encourage everyone to join a discussion group. If you are looking for a word or phrase, and cannot find it in a dictionary, you can send out a query to the discussion group and within a few hours get dozens of answers. How do you say, "Her boyfriend pushed the stroller down the sidewalk" in Spanish? You can also eavesdrop on other such language queries, many of which are fascinating. Try **flefo** (foreign language education forum), which is part of compuserve (you have to join compuserve to receive it; enter FLEFO in the keyword box and you are on your way) or **lantra-l** (to subscribe, send the line SUB LANTRA-L *your name* in the body of an email message to listsrv@seagate.sunet.se).

- **Online journals.** It is also important and fun to keep up with the changing technologies. The most useful one I have found is *Multilingual Communications and Computing* (<http://www.multilingual.com>). John Benjamins has a new journal out called *Language International* (<http://www.language-international.com>). Other journals include the *ATA Chronicle*, *Language Today*, *Lisa Newsletter*, *Target*, and *The Translator*. A newsletter called TRANSST has a pretty good summary of upcoming conference activity (<http://www.spinoza.tau.ac.il/~tourney/transst/index.html>).

Conclusion: Get networked

While many translators resist the changes in the field, others have welcomed them. In the new global order, translation is on the rise, with opportunities in the business, finance, computer, information technology, music, television, film, medical, and legal fields. Many of the texts involve vocabularies that translators now access easily because of the technologies available in their own field. Prices are coming down for the computer tools for translators so that freelancers and independent translators can now afford them. Fonts and word-processing programs are being written so that many of the world's languages, hitherto not available in computer form, are now accessible. This process increasingly empowers minority groups and allows them too to enter the world's communication channels and markets.

As Walter Benjamin said regarding "the work of art in the age of mechanical reproduction", so too do I argue regarding "the work of translation in the age of computer reproduction", as the means of production change, so too does the nature of the object being reproduced. In many cases the medium is the message. Translators are increasingly being called upon to advise on the cultural norms of a given field in a given country and/or the media available to better reach the intended market and to adapt documents accordingly.

To conclude, then, I urge translators to get connected, to build their own network of both *people and technologies* who and that can support translators in their profession. Some tips for practicing translators include:

- Build your repertoire of specialized knowledge and terminology. Subscribe to on-line newsletters and discussion groups in your area of expertise. Develop a network of "experts" to consult regarding terminology: doctors, nurses, technicians, interpreters, and translators.
- Check out local or university libraries for reference books and resources. Bookmark Internet dictionaries and terminology lists for quick consultation. Compile your own word lists for future reference and build your personal reference library.
- Keep updating computer skills. Take courses in desktop publishing and multilingual word-processing. Find a computer lab at a university or an Internet café where you can word-process or surf and ask questions of others at nearby stations.

- Find a “partner”, someone who will check your work if you check theirs, someone you can call up at midnight for help with a term, and someone who you can recommend to an translation agency if you are indisposed.
- Develop your network of human resources; these include cultural groups in both the target and source languages, information resources for computer questions, fellow translators, contacts at translation agencies for queries, linguistics consultants who can help with proof-reading and editing, and specialists in your fields of expertise.

Translation, which once was a lonely job, underpaid and undervalued, is increasingly becoming a fast-moving, exciting, and empowering field, in which translators are increasingly being asked to be involved in a network of specialists in several fields, including cultural studies, information technology, communication, linguistics, project management, and business administration. They are also more involved in the final production of texts rather than leaving the final decisions up to the in-house executives. It is time to get networked and join the fun.

References

A very useful handbook for practicing translators used at the University of Massachusetts is Geoffrey Samuelsson-Brown, *Practical Guide for Translators*, 3rd rev. edition (Clevedon: Multilingual Matters, 1998).