TRANSLATORS NOW AND THEN

HOW TECHNOLOGY HAS CHANGED THEIR TRADE

By
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FOREWORD

This article is an adaptation of a presentation I made to Unisinos undergraduate students in São Leopoldo, Brazil, in 2006. Its intended audience are translation students or professional translators who have had little or no contact with CAT tools. The original article contained figures which cannot be shown on this page.

ABSTRACT

Over the past few years, translation as a trade has seen significant changes brought about by the advent of new technologies. In an industry that is growing dramatically in terms of revenues, more and more computer applications are being used in order to speed up work and provide greater effectiveness. Among the new technologies, the use of translation memories stands out, by which translators can take advantage of their previous work to avoid repetitive tasks and save time and effort. Such changes are also helping translators gradually increase their average income and get rid of the old stereotype of poorly paid professionals.

Keywords: translator, translation memory, computer-aided translation, CAT tools

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1. INTRODUCTION

The latest years have seen remarkable changes in the world's economy and, consequently, in everyone's lives. Many trades have disappeared, whereas others have emerged and still others have changed dramatically to keep up with contemporary demands.

The trade – and art – of translators is arguably very old. In general terms, translators have existed ever since two persons speaking different languages managed to communicate by means of making one's language understandable by the other party.

Whatever was for many years seen as an art, such as painting, music or literature, has become a business asset these years. Translation, as most other

occupations nowadays, is market-oriented, time-sensitive and must be error-free.

This means that the typical translator has also changed. Instead of a highly educated, often anti-social scholar sitting at his table for months struggling to find the right word to translate some valuable poetry, today's translator is usually in front of a computer screen churning out thousands of words per day to translate documents whose timely translation may mean sumptuous sums of money in business to the client.

Still, the outside world seems to be unaware of such change. The mere mention of translation reminds listeners of a simple hobby or, worse than that, an odd job. Such ignorance is so wide that it is seen within the academic world and even among students aiming at obtaining a degree in translation.

This paper aims to show how technology has changed translators' trade over the last years – and centuries – and to demonstrate how it has turned translation from art into business. In an industry that makes billions of dollars a year, good translators are starting to find a way to get their share and to live high-end lives from their profitable activity.

Nevertheless, no money was involved by the time the first major works were translated, as shown in Chapter 1, which goes back to Jerome and to the first translations of the Bible in order to provide an overview of the trade in years gone-by and which also mentions the first developments, such as the advent of the press and the discussion of the theory of translation.

Chapter 2 comments on the first tools available to help translators in their job. Emphasis is given to the typewriter, which, when properly used, can increase productivity. However, such output growth was not seen in a positive light by many professionals at first. It was the beginning of the shift from art to business.

A major breakthrough was seen when typewriters were put aside in favour of personal computers. Besides allowing the same touch-typing skills to be used, PCs gradually developed to provide other extremely valuable resources for translators, including electronic dictionaries and glossaries, voice recognition software and, most of all, computer-aided translation tools. Chapter 3 tries to render an accurate description of all such resources, placing special focus on how CAT tools are so helpful and why they have become almost mandatory for professional translators nowadays.

Computers have been used as early as of the late Seventies and early Eighties, and have become almost a commodity since then. However, it was not until the early Nineties (or mid Nineties in Brazil), that they acquired a totally new dimension with the creation of the Internet, an international network of computers. It suddenly became possible to communicate in real time with other people by means of such computers and to access vast repositories of information stored in computer servers located anywhere in the world. Chapter 4 focuses on how the Internet can be used as a corpus to assist translators in their job. It also mentions how translators can now instantly solve terminology queries by consulting with other colleagues by the click of a mouse.

The Conclusion wraps up the topics approached and tries to foresee what translators should expect for the future, whether a back-to-the-roots approach or even more involvement in state-of-the-art technologies – up to the possibility of making human translators obsolete.

Concerning my Bibliographic References, I need to make an observation. Most references on the subject of technologies applied to translation are currently available online. In addition, the few printed references I have found to support my research lack the in-depth focus I wish to pursue. Therefore, I have decided to take full advantage of online sources such as mailing lists, web pages and portals, which are duly referenced in the form of clickable links. In addition, I have added all written materials and applicable online resources I have researched to the relevant section at the end of this paper.

This Final Paper ends with an Annex containing an interview with Mr. Jack Doughty, a British translator who has seen many changes to the trade throughout his long career.

2. THE FIRST TRANSLATORS

As Giordano Bruno (quoted by John Florio, 1603) once said, "From translation all science had its offspring."

Such statement reveals the antiquity of this trade. In fact, it may be argued that, as of the moment in which two individuals speaking different languages tried to engage in communication, there was translation. Likewise, as of the moment a third person versed in both languages tried to facilitate such communication, there was a translator.

However, the formal work of translators concerning written translations was not possible until the very advent of writing. Before that, in pre-history, translators were mostly mediators - marriage-brokers, go-betweens, dealmakers, peace-seekers.

As writing was initially mastered by just a few individuals, so was translation. And, as the first books were written by members of the clergy, so were the first translations.

The first serious and long endeavours into translation were aimed at religious books. In this aspect, no other early translator is more frequently remembered than Jerome, or Saint Jerome, nowadays widely regarded as "the patron of translators."

Jerome, born in the year 347 in the territory now belonging to Bosnia-Herzegovina, translated the Bible from Greek and Hebrew into Latin. Jerome's edition, the Vulgate (meaning it was translated into vulgar rather than erudite Latin), is still the official biblical text of the Roman Catholic Church. His work received plenty of criticism, which shows the subjective nature of any translation. The entry for Jerome in the Wikipedia describes his greatest work in detail.

Jerome was a renowned Latin scholar at a time when Greek was held in much higher regard. Even though he spoke some Hebrew, he moved to Bethlehem before initiating his work in order to improve his grasp of the language and to know more about Jewish scripture commentary. He began his translation in 382 by correcting the existing Latin language version of the New Testament, commonly referred to as the Itala or Vetus Latina (the "Italian" or "Old Latin" version). By 390, he had turned to the Old Testament in Hebrew, having previously translated portions from the Septuagint Greek version. He completed this work by 405. For the following fifteen years, until he died, he produced a number of commentaries on Scripture, often explaining his translation choices.

The advent of printing, made possible by Johann Gutenberg in the 15th century, made it easier for other versions of the Bible to appear, notably by Martin Luther into German and Jakub Wujek into Polish. Concerning English, the King James Bible has had lasting effects on the religion, culture, and language of English-speaking countries.

The King James version of the Bible was first published in 1611. Ironically, though often referred to as the King James Version, the only active part King James took in the translation was lifting the criminal penalty attached to its translation and setting very reasonable guidelines for the translation process. The book is widely regarded as an instrumental founding block for Modern English, as many Latin words were borrowed into the language.

Between the 17th and 18th centuries, English writers such as John Dryden, Alexander Pope, Abraham Cowley, Lord Roscommon and Lord Woodhouslee were involved in a movement known as Augustan Poetry, inaugurating a new era by taking into account not only accuracy, but metrics and the cultural content of the translation. It was intended to provide a meaningful text for readers, and not only a literal translation.

Until now, such dilemma between providing an accurate rendering of the original and adapting it to the target influence has been the goal of most translators, with the most renowned of them being able to successfully address this issue. Among them, Geoffrey Chaucer, Gregory Rabassa, and Paulo Rónai.

3. EARLY TOOLS

For many a year, the only companions of a translator were ink, quill pens and paper. It was probably with such gear that Jerome spent years translating the Bible. Since early writing was also considered an art, calligraphy was paid much attention to, which eventually would lead to a long time to draft one or two pages.

Even though the invention of the pencil, in the 19th century, eased some of the pains by allowing the text to be more easily erased and overwritten, it was not until the development of the typewriter that a tool caused such great impact in the trade. By means of touch-typing, it was then possible to write many more words per minute, and without worrying about calligraphy.

However, such development was not very well received among some translators. The idea of using a device to provide faster output was against the very idea of translation as a painful and delicate art. To some, it was as if a machine were invented to create paintings, dispensing with the painter's creativity.

Nowadays, some translators are still uncomfortable with anything that might make their trade easier. Some of them have long been refractory to any technological advances. It has been as if speeding up the process would make it less valuable or honourable.

Whereas using an ordinary typewriter may seem rather old-fashioned and outdated nowadays, it used to be considered some kind of undesired advance by some translators. At that point, one could already see two "schools" among translators: those who see it as an art, and those who see it as a trade, or even as an asset. And it is not just a matter of age, as shown by English translator Jack Doughty, who has been in the trade for over 53 years.

In 1965, when Mr. Doughty started freelance work, he already used, in his words, "a cheap portable typewriter." He never provided translations in

handwriting, even though the firm for which he worked kept accepting such translations for many years afterwards. In 1975, he switched to an electric typewriter. An electronic one followed in 1988. As of 1991, he has been using a computer to prepare his translations.

His career may summarise how translation tools have evolved over the years. Besides the equipment used for actually writing the translation, the type of material employed for consultation has seen changes as well. As discussed later in this article, hardcopy dictionaries and glossaries are being increasingly replaced by electronic and online resources. On the other hand, this does not mean printed material is outdated. Mr. Doughty, for instance, accepts that electronic dictionaries "have improved considerably," but says he "cannot imagine abandoning my (his) collection of dictionaries on paper."

However, translation is no different to other trades when it comes to changing old habits. For all the acknowledgement of how relevant modern translation tools are, there is a trend among more experienced translators not to embrace them unless it proves necessary, that is, unless the translator may end up losing his job in case of non-compliance. "I don't find it easy to master new technology and as long as I and my clients are happy with the way I do things now, I shall continue in the same way," explains Mr. Doughty.

4. COMPUTERS APPLIED TO TRANSLATION

Even in the face of so much opposition by old school translators, computers are now part of the trade. Whereas some professionals may prefer to work without modern devices, electronic aids are often an unquestionable asset, speeding up the process, providing consistency and preventing translators from relying on their "traditional" memory only, but rather introducing the idea of electronic memories, or, in the current lingo, translation memories.

Whereas some electronic tools are very expensive software that may take years for one to learn, others are a mere reflection of old reference books in electronic format: dictionaries and glossaries.

It may be argued that a translator who relies on his memory only and carries out no research whatsoever is not a reliable professional. A translator is not expected to know everything in his subject matter, and even if he does –which is theoretically unlikely–, he is not expected to remember everything by heart. Thus reference materials have always been very valuable in the trade of translation.

However, there are at least two drawbacks to carrying out research in hardcopy reference material. The first of them is the time it takes for the necessary information to be found. Even with well-organized catalogues, summaries and indexes, it may take quite a while for the right book to be found and for it to be browsed through until the information is found. Worse still, sometimes you may not even know exactly what you are looking for. Albeit at first seeming a bit nonsensical, this is very common when you have the feeling "you knew that word," but your memory is not serving you well. In that situation, simply looking at a pile of books makes you feel impotent and frustrated.

Another drawback is that no room will ever be enough for all the books you need. Even a translator who specialises in a very specific subject matter, such as tax law, will find it harder to store all his books and have them handy for consultation at any time – not to mention the fact that they will have to be bought or acquired somehow, which means touring a number of libraries and spending a lot of money in the process.

4.1. Electronic dictionaries and glossaries

The advent of computers has minimised such drawbacks – or eliminated them altogether in some cases. A computer-based dictionary, for instance, is stored in a fraction of a computer disk, which means all but nothing in terms of space. It still has to be bought, but an electronic version tends to be less expensive than a hardcopy dictionary because there are fewer costs involved: no paper, no shipping, no ink, etc. The translator will also need to spend considerably on computer storage space (i.e. hard disks, CD-ROMs or other similar devices) to be able to store all his dictionaries. Nevertheless, it may be argued that buying a hard disk to store 1000 dictionaries may cost less than buying a bookshelf –or renting a room– for the same number of books.

In the end, even if savings in terms of money are not very significant, there will be a key reduction in time spent doing research and in ease of consultation. Computer dictionaries usually proceed automatically to the term you want to consult by simply typing the relevant word. Also, the entry may contain links to other relevant information, that is, when you look for the term "horário" in English, you may be simply a click away from relevant searches such as "fuso horário" or "horário de verão." In the end, a few minutes or seconds may be enough for a real adventure through a reference book, something that might take much longer by examining a pile of books, and that would certainly discourage and frustrate the examiner – in this case, the translator.

4.2. Online resources

As the Internet becomes more and more popular, it is also easier to find online resources that one would otherwise have to buy – either in hardcopy or

magnetic media. Nowadays, many dictionaries can be browsed online, saving time and money. The Merriam-Webster, for instance, allows users to check the meaning of any word in English, and it also contains idiomatic expressions and phrasal verbs. The online version is rather comprehensive and still at no cost. The only drawback is that, if you do not know the word you are looking for, it may be of not as much help as hardcopy material, as it will only return a match if you insert a word. For instance, if a translator has the feeling the word he is looking for starts with "ped," he will most likely go through all words starting in "ped" and find what he is looking for in a hardcopy dictionary. This unfortunately would not be possible at the Merriam-Webster website.

4.3. Computer-assisted translation tools

Computer-assisted translation (CAT) tools are computer software packages aimed at facilitating translation by creating the so-called translation memories (TMs) containing the choices made by the translator himself. When a CAT tool is used, the source document, written in a source language, is segmented – a segment can be any part of a text, but it is usually a sentence ending in a full stop. Each source segment, then, is supposed to be matched with a target segment. When no previous match is found in the TM, the translator is prompted to fill in a blank target segment with the respective translation. After the translation is entered, a translation unit is created containing the source segment and the target segment, along with source and target language information and other optional data, such the author's name. This translation unit is added to the translation memory.

Whenever a new segment is opened for translation, the software scans the translation memory for that segment. If it has previously been translated –in which case it has been stored in the TM–, the TM shows the stored translation as a "100% match" in the target segment. If the new segment is found to be very similar to one or more segments stored, the TM may show a "fuzzy match" in the target segment.

Both a 100% match and a fuzzy match are suggestions presented to the translator by a database created by himself; they are by no means automatic choices that have to be followed. However, whereas a 100% match may be edited by the translator depending on the context, a fuzzy match must be edited because it is not actually an acceptable translation of the source segment, but just a translation of a very similar segment, which may prove useful on how to translate the new one.

Nelson Laterman, a Brazilian translator living in the United States, explains in his very informative personal website how CAT software works:

CAT Software allows the development of a database of sentences. To each sentence of the original corresponds a matching translation. The translator can update, correct or delete the sentence as he/she sees fit. The database can be used later in other projects for the same client.

Another explanation, now a bit more technical, is given by French translator Sylvain Galibert.

CATs consider a document to be a succession of meaningful units called segments. Typically a segment is a sentence, but in some cases, it could be a phrase or even a single word. When translating a document, the CAT will isolate segments in your document. This process is called segmentation. It is by itself very useful to the translator as he no longer has to look for the next sentence to translate. It's right in front of his eyes. The segment containing the sentence of the original document is called source segment. The segment containing your translation is called target segment.

The rationale behind using CAT tools is to speed up the translator's work by preventing him from having to stop and research the same term over and over again. It is, in fact, a technological aid to the translator's own memory, which sometimes cannot be trusted.

To understand how useful translation memories are, nothing better than producing one and seeing the results. We may take the following case as an example.

In a very lengthy legal document, the translator has to translate the heading "Grace Period." He does not know that the correct translation would be "Período de Carência," so he has to stop his work and carry out some research to find out what the correct translation is.

Now let us suppose that, again, he finds the same term in a later translation and his memory fails him again. If he did not use a CAT tool–and consequently did not create a translation memory–, he would have to lose time again by looking over the phrase.

However, if he did create a translation memory and is using a CAT tool, the next time he finds the expression "Grace Period," the software will automatically present the expression "Período de Carência" and ask him whether he would like to keep it.

This may be a very simple example, and one might say that the translator would lose just 30 seconds to find the right translation without a CAT tool. Nevertheless, one should also consider that such memory lapses occur very often, and that such deviations may ultimately hinder the translator's concentration and impair his work.

Another advantage in using CAT tools to remember previous choices is style consistency. Good writers usually learn that repeating the same word often and often is bad style. They learn to use synonymous as often as possible and the mere thought of repeating the same word in the same sentence is a nightmare. However, there are cases in which a word cannot be replaced with another because it may lead to misunderstandings. For instance, things have to be very clear in a contract. Therefore, even though words such as "vendor" and "supplier" may be synonymous in certain cases, their usage must be consistent in a legally-binding document.

4.3.1. Other features

The identification of 100% and fuzzy matches is not the only way in which a CAT tool may be useful. It may be used to look up a single word or term in the translation memory. It may show up in another document in a different context and the translator may still locate its previous translation at the click of a mouse. Most CAT tool packages have mechanisms that allow the user to check whether the translation memory contains a specific term and present the sentences and contexts in which it has been formerly found and translated.

4.3.2. Leading software packages

The top translation-memory package nowadays is unquestionably SDL Trados, which may cost in excess of EUR 1,000 and requires a dongle (physical peripheral connected to the computer serial port) in order to work. The reason is to prevent pirate copies from being used for free. Wordfast, in turn, is less expensive, costing from EUR 125 to EUR 250, and can be used on a full basis for free as long as translation memories contain up to 500 segments. SDLX used to be a player in this market, but, following SDL's acquisition of Trados, it may be discontinued in the future in favour of Trados Workbench. Other packages worth noting are Star Transit and Wordfisher.

4.4. Computer-assisted translation and machine translation

In order not to lead to confusion, the difference between computer-assisted translation and machine translation should be noted. As explained above, CAT tools are used to provide suggestions based on the previous work done and stored by the translator himself. Machine translation, in turn, is a process that involves the use of algorithms to automatically translate words or sentences into a language other than the source.

One may wonder then why there are still human translators when a machine can automatically do the job. The answer is that, for all the billions of dollars invested in artificial intelligence, no computer software has ever succeeded in translating complex documents containing slang, abstract language and words the meaning of which will depend on an intricate context.

Accordingly, it has been very important for professional translators to make it perfectly clear they do not use automatic translation. Even people with not much linguistic knowledge will recognise that software such as Systran will hardly provide them with a correct and idiomatic translation. So, when they hear that a translation is using computer-assisted tools, it may convey the wrong idea that the translator is going to lay back and run some automatic translation with very poor results.

In October 2000, the Wall Street Journal was quoted as giving two free online automatic translation services a test run and concluded as follows:

These services are passable for travellers or for those wanting to translate a letter from a distant cousin. I definitely wouldn't use them for business or anything that remotely requires accuracy (A Closer Look, 10/00).

Last but not least, it should be mentioned that machine translation is sometimes used on a serious basis. As Ursula Schwalbach and Franco Zearo describe in their article Machine Translation: Translating Automation into New Opportunities, published in the May 2006 issue of the ATA Chronicle magazine, "language automation depends largely on consistent language patterns." They maintain that, for the sake of slashing translation costs, computer translation may be used in a project if the source text is written in a "disciplined" way, that is, by using plain and short sentences and by avoiding words, phrases or sentences that might have very different translations.

Among the known pitfalls are noun clusters, nested relative clauses, and those ubiquitous "-ing" constructions always in search of their proper agents. For a company, it means separating creative writing efforts (for example, marketing and advertising copy) from text intended for MT or other automation.

Even so, the authors concede that post-editing is inevitable, as the likelihood of the computer's producing inaccurate translations is high. Nevertheless, the cost of the translation job as a whole will arguably be lower, since editing usually costs less than actual translation. As the authors sustain, "when coupled with terminology management, and post-editing services, MT can provide an attractive cost/benefit solution."

4.5. Other useful software

Besides software programs that have been developed specifically to facilitate the work of translators and linguists in general, such professionals may currently benefit by using an array of other software solutions to speed up and improve their job. These programs include voice recognition, optical character recognition and even Microsoft Word features.

4.5.1. Voice recognition

Occupational diseases are a major issue for any professionals, and translators are no exception to the rule. Looking at the computer monitor for long hours and sitting in an improper position are two examples of activities that might lead to illnesses.

Another potentially hazardous habit is typing on the keyboard for too long. It can affect muscles and nerves and lead to repetitive strain injury (RSI). Many translators have experienced such symptoms, whereas many others are afraid they might some day develop them, and it's to prevent it that voice recognition software has been increasingly used in the field of translation.

IBM's Via Voice and Dragon's Naturally Speaking are just two examples of commercially-developed software packages that allow computer users to dictate texts instead of typing them on the keyboard. Both are available for all major languages, but they also share the same vulnerability: they need extensive "training" of the software so as to correctly "understand" all words that are said and transpose them to the word processor software.

In addition, microphone sensitivity may also play a role in hindering voice recognition effectiveness. The ideal scenario includes a high-fidelity microphone, total absence of noise, a clear and steady pronunciation and, most of all, plenty of training, by which the software is told how its unique user tends to pronounce each word. Even with such drawbacks, voice recognition software is a revolutionary alternative for those who, for any reasons, do not want or cannot use the keyboard any longer.

American translator Donna Sandin examined in the July 2006 issue of the ATA Chronicle magazine the ups and downs of using voice recognition software.

Training time for this kind of program has been minimized, but do not buy it unless you are willing to continue to use your mouse and keyboard for certain tasks. Using voice recognition 100% of the time is not practical, and you save trouble by using both voice and keyboard functions

4.5.2. OCR

An optical character recognition (OCR) software program, as its name implies, converts image files into text files by optically recognising alphabetic characters. It is particularly useful when the translator receives a file that is a digital picture of newspaper page, for instance.

The OCR software scans the image file (which could be a JPG, a BMP or a PDF file created from an image, among other formats), identifies the characters, words and sentences and copies them into a text file. However, as it occurs with voice recognition, OCR may not function properly unless in an ideal scenario: the font in the image file must not be too small nor can there be any text overlapping.

Usually, the OCR program will allow the user to review the operation by identifying a few potentially incorrect words transposed to the text document and comparing them to the corresponding part of the image file. OCR software also usually contains a built-in dictionary in order to validate the program choices. Whenever the scanning of the image file results in an unknown word, the user is prompted to validate the choice, as there could have been an error. One typical OCR error is mistaking a small "L" for a capital "i" (both looking the same as "I").

4.5.3. Microsoft Word

Translators do not have to go to any lengths to find useful software to make their work more effective. Microsoft Word for Windows is arguably the most widely used word processor, and this is partly due to the fact that it is very intuitive and easy to use – you just launch it and start typing. However, Word is a very powerful application with countless features that most users never take advantage of. One of them is the so-called AutoCorrect, by means of which typing frequently repeated terms may be prevented. As American translator Clifford E. Landers demonstrates in his article Save Time and Avoid Errors with MS Word's AutoCorrect, published in the June 2006 issue of the ATA Chronicle magazine, the user may assign an abbreviation to any given word, sentence of sequence of words. Afterwards, whenever that specific abbreviation is typed, followed by a space, the full word or sequence of words will appear, clearly saving typing time, as exemplified by the author.

(…) just imagine how much this technique will save you when dealing with longer phrases like Supreme Court decision ("scd"), early Shakespearean drama ("esd") or Holy Roman Apostolic Catholic Church ("hracc").

In the same article, Landers also mentions Word's glossary function. Whenever the software finds a word that is not in its glossary, which is a possible typo, it underlines the word in red, and the user, by right-clicking on the word, opens a context menu with similar words, one of which might be the actual word he wanted to use. This is specifically useful when the translator is unsure of the spelling of a given word but does not want to lose time by looking up a dictionary.

5. THE INTERNET AS A CORPUS

Until not very long ago, searching for information on the Internet was like trying to find a needle in a haystack. You could have your bookmarks containing your main reference websites, but there was always a feeling that you might have been missing some information published elsewhere. Unlike with hardcopy material, you could hardly find a comprehensive directory containing all the publications for a subject, an author or a year.

That started to change with the development of the so-called search engines. With one major difference: they go much further than looking for key-words such as title, author and year of publication. They can actually search inside virtually any web site. It is as if you could assemble all your old books and instantly find out how many times a given term was used, in which books, in which pages, and in which context – that is, next to what other terms and sentences.

No other website may sum up this breakthrough better than Yahoo directory (now remodelled) was for many years the number one in terms of Internet searches, but the mechanism was different: you searched for a website rather than for specific information. If you wanted to find a website about translation, you might type the word "translation" in the query field or browse through directories until arriving at the specific field of knowledge.

Things changed with the concept of search engines. By means of software programs called crawlers or spiders, a wealth of computer power visits countless webpages every day and follows every link contained on them, which means they "crawl" over the Internet trying to find as many pages as possible. If there is one link on your webpage, odds are these crawlers will at some point reach it.

Since these servers running crawlers have huge storage capacity, they can make a copy of each webpage visited (excluding pictures and some special effects). When you then submit a query on Google, for instance, the time it takes for virtually the whole of the Internet to be searched is just the time it takes for the data to travel from your computer to Google's servers and come back - all but nothing in this high-speed Internet era.

Nevertheless, the first search engines, such as Yahoo itself, lacked something very important, which is the ability of ranking websites according to relevance. Google, in turn, took the Internet by storm when they developed specific (and secret) algorithms that take specific patterns and information into account to present the most relevant information at the top of your query results.

For instance, on an earlier search engine, a query for "Brazil" might result in any website containing this word – that is, billions of webpages. On Google, the following results appear at the top: Brazil's Federal Government, Brazilian Tourism Portal, Yahoo! Brazil, IBGE (Brazil's Geography and Statistics Institute), and Jornal do Brasil (a Rio de Janeiro newspaper, one of the most traditional Brazilian dailies). These are very relevant websites for whoever wants to find information about Brazil.

5.1. Translation and Google

It did not take long for translators to realise the potential benefits of such search engines. They may constitute the biggest corpus on Earth. The Internet ceases to be just a tool by which dictionaries and glossaries may be searched for specific entries to be translated or explained; now translators can enter any term and find out how it is actually used in the language.

For instance, a non-native English speaker may be unsure about whether it is more common to say "heavy rain" or "strong rain." A simple query on Google gives the hint: "heavy rain" results in over 11 million web pages; "strong rain", in turn, results in fewer than 50,000 web pages.

Of course there are some drawbacks to this approach. The mere fact that almost 50,000 web pages contained the phrase "strong rain" –which is not at all idiomatic in English– shows how unreliable the Internet may be as a source of knowledge. After all, anything published online – and captured by the crawlers– will be part of this huge corpus.

Fortunately, Google's algorithms tend to present "reliable" websites at the top. It is known that this is obtained by measuring what they call "page rank," a figure that is arrived at by taking into account the number of other websites linking to that specific page.

Nevertheless, a translator is better off not entirely trusting a machine. Checking the websites listed in search results is essential to verify the adequacy of the information. For instance, if the hypothetical translator trying to check the usage of "strong rain" did not even have a clue of the possibility of using "heavy rain," he might well be tempted to go with his first idea after seeing almost 50,000 occurrences of this phrase.

However, a closer look shows that the top hit for "strong rain" is actually for "strong, rain" in the middle of a sentence. The same is true of the fourth hit. The fifth talks of "strong rain rates". The second, in turn, is a webpage about Algerian affairs, very likely written by a non-native speaker of English.

Search engines prove no exception to the rule that every source of information should be looked upon with caution. However, when correctly used, they are arguably today's translator's best friend.

5.2. Closing the distance gap between translators

Technology advances, most notably the Internet, have not only helped translators do their job faster and more consistently; they have actually brought together translators who live very far away from each other. In the early days of the translation trade, it was uncommon for translators to meet up and discuss their work. When it happened, it was by means of conferences and summits on a periodic basis in which broader matters were discussed.

However, it has become increasingly easy to contact fellow translators quite instantly in order to solve terminology queries when reference works seem not to suffice. Even if the Internet does not bear any fruit in terms of providing references and sources for research, it still allows translators to talk to each other and share their opinions, possibly leading to solving such query.

Nowadays, there are messaging software programs such as Windows Live Messenger, ICQ and Skype, which allow instant communication, both text- and voice-based. However, the most successful means for translation-related discussions are the so-called mailing lists.

A mailing list is a facility on the Internet that links a group of people together with common interests. If you belong to a mailing list you can receive regular messages posted to that list via email.

By sending a message to a mailing list, a translator may potentially reach numerous other professionals subscribed to the same list and receive responses from all of them, responses which will also be available for the other subscribers. Over time, the list itself constitutes archives that become a compendium of information on how translation problems are solved and of the processes involved.

Examples of mailing lists are Lantra-L and Trad-Prt. The former is open to translators of all languages and is not moderated. Sometimes, due to its very wide nature, subscribers do not follow all threads and create e-mail filters to receive just messages that pertain to them – for instance, only messages that contain the word "Romanian." The latter is strictly moderated and is aimed only at translators who work with Portuguese either as a target or source language. Messages unrelated to translation are forbidden, unless if properly tagged as "offtopic" in the subject line. Certain subjects, such as politics, are prohibited in all cases.

5.2.1. Translators' directories

The Internet also proves a valuable tool to market translators' services. The most successful example so far is a website based in the United States, currently with thousands of subscribers. ProZ.com went live a few years ago and is now typical of how a Web portal may help translators advertise their services and get jobs. Users (non-paid) and members (paid) have different access levels to the content, but I will consider here the benefits provided to members who pay an annual fee of US$ 100.

The KudoZ is a feature by which translators may present terminology queries to be answered and discussed by colleagues. The asker has the option to present further notes within the same query and then choose the most valuable answer, granting points to the respondent in a score-based system that ranks translators by language combination and area of expertise.

This ranking is important when potential outsourcers are looking for translators in the Directory. The more points a translator achieves in a given area or combination, the more experienced or knowledgeable he may potentially be. Both the Directory and the KudoZ areas provide links to translators' personal web pages hosted by ProZ.com itself. These pages contain a free-text area for general information about the translator, as well as basic information such as educational background, certifications, KudoZ points, availability, rates (optional) and native language.

The BlueBoard area is of immense importance as translation has become a telecommuting activity. Oftentimes translators work for a client or agency located in another country, and, as such, contracts can hardly be enforced and both parties rely on each other's good faith – both in terms of delivering the job within the expected standards of accuracy and punctuality and receiving payment. Just as outsourcers browse the website looking for clues that might indicate the suitability of a given translator for a given job, translators can access the BlueBoard to place their comments about the payment practices of agencies and clients they have worked for. If an outsourcer has 10 comments by translators, and all of them are highly positive, odds are bona-fide translators do not need to worry about not getting paid by such client or agency. However, if the outsourcer reputation is somehow stained

by multiple negative comments, translators approached by the company might want to request payment in advance – or forget about such outsourcer altogether. In the end, bona-fide outsourcers will not want to have their reputation stained because that will mean a hard time to find good and reliable translators in future to pass on their assignments.

ProZ.com members can also post jobs. It is not uncommon for a translator to outsource jobs – as long as the client is aware of such practice. In that case, he or she may choose to contact a specific translator or to post a job online, in which case translators may apply in accordance with the poster's requirements. ProZ.com serves as a venue only and takes no responsibility for the agreements made by poster and bidder.

Other tools are available for site members, including web hosting, which means translators are provided with disk space to host a personal website not affiliated with ProZ.com and can even buy a specific domain by paying an extra fee.

There are numerous other websites offering more or less the same content made available by ProZ.com, including Translators' Café and Translators' Base. However, ProZ.com stands out because of a higher number of members and also greater services provided for non-paid users. For instance, just a few features are "members-only," among them hosting and unrestricted access to the BlueBoard. Common users, in turn, may post comments at any time but have to spend money or Browniz –points won by participating in other areas of the website– to access outsourcer entries.

5.2.2. Translators' associations

Because of the very nature of their job, it has been difficult to conjure up translators in an association. The popularity of Internet, computers, telephony and other technologies is changing this picture, and now translators can count on a myriad of groups, forums, agencies and associations.

Nowadays, the most respected and well known is the American Translators Association, known as ATA. In spite of the name, its members are both Americans and non-Americans.

The association was founded in 1959 and is the largest professional association of translators and interpreters in the US, with 10,500 members in 70 countries.

In 2005, the ATA conducted the Translation and Interpreting Compensation Survey, which, as well as providing the average income figures of its members, also rendered interesting demographics. A total of 67.1% of ATA members are women, against 32.9% who are men. The majority was not born in the United States (63.6%, against 36.4% of American-born members). In terms of education level, three quarters of the respondents informed they have at least a bachelor's degree (32.1%) or also a master's degree (42.5%).

One of the main aims of the association –and one that makes it popular– is to provide accreditation. Considering that translation is an unregulated profession in many places, potential clients usually try to assess the expertise of translators in a series of ways. Being a member of an association such as the ATA is surely a good attestation for a translator, albeit not a guarantee.

In Brazil, there are two main associations, the Abrates, which is ATA's counterpart and offers certification programmes as well, and the Sintra, which is a translators' union aiming at representing the class.

6. CONCLUSION

Ever since its inception, the translators' trade has seen a myriad of changes, as shown in the previous chapters. Whether by means of translation memory software, electronic dictionaries or voice recognition, translators are now able to speed up their work and make it more effective and efficient.

Ultimately, the result of such changes has been best reflected in the income earned by translation professionals. It may be argued that the myth of translators' being poorly-paid and under-acknowledged workers may be now a thing of the past. Perhaps they still do not receive the recognition they deserve, but the revenues earned from translation are on the way up.

This increase is closely related to the use of technology applied to translation. The rationale is simple, as translation tools allegedly increase the amount of work a translator can perform within a certain period of time. Since translation is usually paid by the word (in some cases, it may be paid by the hour or by the page), greater effectiveness translates into higher income.

The ATA Translation and Interpreting Compensation Survey, conducted in late 2005, shows that the average US-based freelance translator (meaning an independent contractor who does not work in-house for any specific client) makes on average USD 54,207 per year. That amount puts translators on a par with other professionals, such as lawyers, architects, doctors and university professors.

Since many ATA members do not actually live in the United States, the survey also mentioned that non-US based translators earn a little less, at USD 47,587 per annum on average. Still, if the amount is converted into Brazilian reais, as of 07 September 2006, it exceeds BRL 100,000 per year, or almost BRL 8,500 per month.

The survey also showed that the average US-based translator charges USD 0.18 per source word translated. The amount is a little higher than the rate suggested by Sintra, translators' trade union in Brazil, namely BRL 0.22 for translation into Portuguese and BRL 0.32 for translation from Portuguese.

It should be pointed out, however, that both ATA and Sintra simply state the average rates practised by the market, based on their own information. Neither of them wants such figures to be seen as pricing suggestions, as such practice might be construed as in violation of antitrust laws and against free competition. Therefore, it can be argued that translation rates may vary from far below average to far above average.

On the other hand, one should not fail to mention that only a small percentage of translators take full advantage of the cutting-edge tools currently available. According to German translator Jost Zetzsche, out of a universe estimated at 300,000, only about 10,000 to 15,000 translators worldwide use translation memory software. Such scenario, in my opinion, is likely to change in the near future as more and more translators understand the professional and financial benefits that lie behind embracing technology.

One of the purposes of this paper is to encourage the translators who may eventually read it to embrace the tools modern technology offers them, lest they may fall behind in this competitive world, thus losing the professional and financial benefits they may otherwise reap.

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8. ANNEX

Interview with Mr. Jack Doughty:

What tools did you use when you started working as a translator?
In 1965, when I started doing freelance work, I had a cheap old portable typewriter. No desk, no chair - I put the typewriter on a coffee table and sat on the floor. But it wasn't very long before I got a desk and a chair.

Did you ever provide translations in handwriting? Why?
No, though the firm for which I started working in 1965 would have accepted handwritten translations at that time and for many years after that.

When did you switch to a typewriter and/or a computer?
Typewriter from the beginning in 1965. Electric typewriter from about 1975, electronic one from about 1988. Computer from 1991.

Do you think there is any advantage in performing/providing handwritten translations? Please list a few.
No. I would never do this unless specifically asked to, and I cannot think of any reason why anyone would want me to do so.

Do you find it comfortable to use a computer to work?
Yes, though it took a bit of getting used to at first.

Do you prefer to use electronic or paperback dictionaries? Why?
Until fairly recently, I would have said dictionaries on paper (but properly bound ones, not paperbacks). But electronic ones have improved considerably and I am now happy with either. However, I cannot imagine abandoning my collection of dictionaries on paper.

Do you think computers have helped translators in their trade? In what way?
Yes. Obviously word processing has great advantages over just typing, in terms of producing a decent-looking document (which was what was usually wanted up to about 10-12 years ago) or file for sending to the client.

Do you have any colleagues who are refractory to technological advances? Why do you think they hold such an opinion?
No, but I am rather "refractory" myself, in that I do not use Trados or any other CAT software. I don't find it easy to master new technology and as long as I and my clients are happy with the way I do things now, I shall continue in the same way.