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Translation Programs, Speech Recognition, and Translation Options¹

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This paper is a report about translation programs. It is not based on any knowledge about machine translation, but simply on user experience. As I'm often disappointed with reports written by so-called professional evaluators of software who frequently have no particular knowledge of the subject matter related to the software they discuss, I believe that it is our obligation as scholars to also dedicate some of our time to investigating practical tools. I think that reports written by people who are versed in the material may often be more reliable than the regular stuff. I know fully well that scholars often look down on such practical investigations, as they are considered to be too simple to be presented in sophisticated academic conventions. I therefore have decided to take this task upon myself as one of the privileges of old age.

Professional translators often reject translation software as highly inadequate. It is contended that they do not save time and work, because they require a lot of post-editing. I wish we had some real data, based on the analysis of the amount of work invested by professional translators in manual versus computer translation. Unfortunately, no one has undertaken such an investigation, probably also because of the lack of co-operation expected from professional translators. I am therefore not going to contest this general evaluation by professional translators, because their livelihood depends on an efficient and speedy accomplishment of their jobs. Many of them have no knowledge or interest in what happens to their products after they are delivered, even though quite often these might be post-edited to an ex-

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tent that would be no less than the extent believed to have to take place with computer translation products.

I would consequently put aside any polemics with professional translators and turn to look at these matters from the point of view of people who need to do translation work non-professionally. My question is: to what extent translation programs can be helpful in alleviating at least some of the burden of preparing texts for such translators? My answer is that they definitely can, although the products must be edited. This means that there must be a human being at the end of the production line to do the final job. If her or his knowledge of the target language is not sufficient, they will have to be helped by other professionals. Naturally, when this is the case, using translation software does not accelerate matters and is not really helpful.

On the other hand, people with a reasonable knowledge of the target language, and who are able to finalize the translated text, can benefit a lot from the use of translation software. It is not easy to calculate precisely the amount of work saved by the use of such software. I would however venture to make an estimate based exclusively on my own personal experience, where, I believe that the time and energy saved are between 30% and 80%, depending on the program and various other factors. When one ventures such calculations, it should be borne in mind that in addition to measurable data, such as the actual time and money saved, one should also take into account the psychological aspect. This means that although in principle a human being working very diligently could produce the same amount of sentences manually within more or less the same span of time, many people who are not professional translators are often unable to carry out the job because they are often psychologically deterred. My contention is that since translation software can deliver a manageable text, much of the drudgery involved with translation (typing, dictionary search) is simply eliminated for the human editor of the text.

Most of my own needs for translation are currently related to my own work. In this sense, I believe I represent quite a large group of academics and other writing professionals who are in needs of producing texts in at least two languages. While in the case of Hebrew I still must carry out all translations manually, I have been generating most of my English-to-Spanish texts with the help of translation programs since I began to use such programs in 1994, when I bought my first *Globalink* translation program for DOS. The program was later converted to the Windows platform, purchased and upgraded by the L&H Company, and then dumped when the latter went bankrupt. I then had to look for new software, and having tested Systran Professional Standard, Word Magic, and PROMT Professional, I have switched to doing most

of my work with the latter, except for an occasional use of Systran, mostly for the languages that are not served by PROMT.

A comparison of the available translation programs

PROMT can translate to and from the following languages: English, Spanish, French, Russian, German, and Portuguese. It works under Windows and there are versions for English-Spanish and English-Russian for Pocket PC (upgraded to work under Windows Mobile 5 in August 2006). Systran Professional Standard serves more languages than PROMT, namely: English, Spanish, French, German, Italian, Dutch, Russian, Portuguese and Swedish. Systran also offers the same package (without Swedish and Russian) for Pocket PC. Word Magic, on the other hand, is currently an application for English and Spanish only, so it has not yet developed into a full scale multilanguage translation tool that can be compared with the two other programs.

Obviously, the most important function of a translation application is its ability to translate as accurately and efficiently as possible. No well developed other features, such as an excellent user interface, or various auxiliary tools, which definitely have their own merits, can compensate for an inferior quality of translation. My comparison between PROMT and the other translation applications definitely puts it ahead of all the others. Although it is very difficult to make a valid assessment because various people tend to attach different values to different factors, I believe that it would be correct to say that the texts produced by PROMT are between 60% and 80% successful in terms of usability. The discrepancy between 60% and 80% is related to the type of text and the language direction used. Some texts are naturally more complicated than others, and I believe there is also inequality between the accomplishments of the various language modules produced by PROMT, as well as varying degrees of success between the various directions. In my experience, translations from English into the other languages have normally been more successful than the other way around. I have tested and worked with English, Spanish, and French, as well as with some German and Russian. In all my texts, translations into English from these languages have been below 60% accuracy, while the results in the opposite direction have been more manageable texts. However, I have read and heard different assessments, which leaves this aspect in a way unresolved. In my own personal experience, texts I translated from French and Spanish into English contained too many sentences that were not comprehensible and thus useless for a reader who is not familiar with the original languages. On the other hand, the direction from German into English has turned out to be more successful, but the opposite direction has rendered far better results. Since most of my work has been creating

texts in Spanish, and to some extent in French, translated from the original English texts, the deficiencies of PROMT have not affected me as they possibly would someone who needs to work in the opposite direction.

Inexperienced users may be frightened by what seems to be a low level of success, namely when it is around 60%. In fact, this is quite a high level of success in view of the fact that manual translation, even when carried out by experienced professionals, may often require revisions. Anyone who has been in the business of editing translations done by others knows very well that sometimes more than 50% of the target text must be thoroughly re-written. Often, such revisions come pretty close to alternative translations altogether. Many translation consumers do not bother to make any revisions not because they are not necessary but because they are too expensive. You can thus find many translation mistakes in the electronic and the printed media, and actually in official documents. 60% to 80% as a raw product to be revised and improved are therefore quite a high level of success.

I would like to reiterate my measures for assessment of success. One is the amount of time, money and energy actually saved by the program. If a piece of text is translated within twenty minutes or less and then revised in the course of two days work, this can compare with the two weeks alternative. In such cases, the savings is quite prominent. Moreover, when one is revising the text that one has written, more attention can be given to the text instead of concentrating on translating procedures. The other measure is not as visible as the first one and cannot be calculated in clear terms at all, but in my experience it is nevertheless of tremendous importance. I am referring to the factor of stress that is quite often present when nonprofessionals have to carry out such tasks. This kind of stress simply deters people from approaching the task. The translation applications help relieve the burden by quickly producing a text that can be post-edited. Although this factor is hardly ever taken into account in the majority of reviews of translation and other software, I would give it a high priority when it comes to evaluating what software can do.

Shortcomings

I believe that the shortcomings of PROMT go back to two different kinds of causes. On the one hand, there are differences between certain languages that make the communication between them more difficult. This applies not only to translation software but to human translation as well. For example, on the levels of grammar and phraseology there is a larger discrepancy between French and English than between French and Spanish. Basic problems like the definite

article between the various languages may still remain unresolved. On the other hand, it takes quite a lot of investment to extensively database all of the possible verbal combinations. PROMT still fails, quite often, with idioms and collocations that are often translated in the wrong order and with an attempt to render them literally rather than with ready-made equivalent combinations. However, in the majority of cases PROMT reaches better results than its competitors. Quite often, PROMT is even better on the level of vocabulary, whereas Systran quite frequently does not provide any translation at all but simply puts the original word into the translated text. This occurs not only when the target language is Russian or Swedish (which is generally quite grotesque and actually should be dropped from the package), but also between the major languages served by this application.

A comment about post-editing

I would like to conclude with a hasty comment on speech recognition in the context of post-editing. In revising a text, sometimes a sentence can be fixed by replacing one word or by changing the tense of a verb, adding a preposition, and the like. At other times, however, a sentence must be completely re-written, even though many of its elements can be still put into use again. To implement such revisions by typing may be at times quite demanding, even at the age of computers. The fastest way sometime is to write the sentence entirely from scratch, which also can accumulate to a lot of work. To alleviate this task, speech recognition can be used. Revising a text by dictation with the help of a speech recognition program is much more practical than doing it by typing. Unlike translation software, the current speech recognition programs can render between 98% and 99% accuracy. If you look at a translated sentence and you know immediately what's wrong in it and how it can be replaced, it takes no time at all to dictate the correct sentence and get it written down without much hassle. Therefore, the combination of translation software with speech recognition can be the ultimate solution for generating this type of texts with the minimum effort and the maximum efficiency. This method may also bridge between the human efficiency of professional translators and the translation programs, and make them more attractive to use.²

Conclusions

Translation programs today leave much to be desired, yet they have reached a level that makes them helpful working tools both for translators and other people in the writing professions who either often or sporadically need translated texts. They must be used with at least

² For more information of speech recognition programs, see my speech Website: <http://speech.even-zohar.com>.

some awareness to their limitations, which means in practical terms that one must be prepared to carry out quite a lot of revisions on the output. In spite of that, the time and energy saving, which also includes alleviating psychological stress, is remarkable. On the basis of several years of work and repeated tests I have come to the conclusion that PROMT is currently the best translation product on the market. However, those who can afford it would often benefit from producing translations with more than one program. It is always likely that from time to time even a less successful program can still suggest better solutions for particular sentences, which can then be transplanted into the more successful text.