

THE GLOBALINK TRANSLATION SYSTEM - GTS

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THE DREAM

An ideal situation might be conceived where we were all multi-lingual expert translators, qualified in our chosen professions with a very high boredom threshold and capable of doing everyone's job as well as our own. Alternatively we could dream of speaking into a microphone and waiting for the computer to printout a perfectly formatted and grammatically correct product.

Whilst the technology exists enabling us to speak into a computer without typing a single key on the keyboard and control a word processor, and even GTS, the rest is still a long way off. Advanced though it may be, machine translation should still only be considered as a productivity tool. A word processor program does not type, punctuate and output documents for you. It is tool to help you increase productivity and improve output quality.

The Awakening

Once established that GTS is a tool, what can we use it for? One can use a hammer for inserting screws into wood and a chisel as a screwdriver, but there are more appropriate tools for the job in hand. GTS is quite simply a tool which processes text in one language and translates it into another.

As intelligent, sensitive and educated human beings, we are capable of distinguishing between moods, nuances and subtleties of a sentence and can extract meaning and sense out of a string of words whether written or spoken. As humans we introduce soul onto the translation process. While GTS cannot do the human, creative, sensitive or emotional part of the translation process as efficiently as we can, it can do the mechanical part considerably faster and with more regularity than we humans.

GTS is capable of:

- analyzing sentence morphology
- looking up the terms in the dictionary
- rearranging the sentence
- translating the words
- synthesizing the sentence

It is therefore capable of handling:

- conjunctions
- pluralisations
- gender agreement.

It is thus not ideally suited to poetry, prose, ambiguous text and for composing casual correspondence.

GTS is however very suited to translation of repetitive lengthy documents such as technical specifications, manuals, patents, etc. It can also be used effectively to produce a rough and ready translation of incoming documents of a general nature where only the gist

of the document will tell you whether further translation is desirable. GTS handles routine superbly well and ensures consistency at all times.

THE COMMERCIAL REALITY

We exist in a world where communication is all important. Without it we cannot sell, buy, explain, complain or even negotiate. In our own language it is already an art. In an alien tongue we need all the help we can get. It is essential that we communicate. In an increasingly competitive world, how we communicate, the speed with which we communicate and the quality of the communication define the difference between success and failure.

The Commercial Benefits

In certain walks of life speed and accuracy is of the essence. In some just speed, in others just accuracy. Quality should never be sacrificed. Being able to react quickly to an incoming document in an unknown language could make all the difference. Going to the expense of translating all incoming foreign correspondence would cost a great deal and would take days to turn around. Running it through GTS will take minutes and will highlight documents worthy of additional expense.

The principal benefits to be gained from GTS are productivity gains in the processing of lengthy technical documents, manuals and the like. GTS takes the drudgery and boredom of the routine work away from the translator at up to 20,000 terms per hour, leaving post editing and stylisation to the more appropriate partner, the human.

Examples of recent real life productivity gains are:

Globalink recently conducted an experiment for IDB (Interamerican Development Bank). One of their translators was taught to use the GTS. She was given a document to translate and spent nine minutes to translate, update the dictionaries and re-translate. She printed the equivalence file, marked up the hard copy with the changes she wanted to make. She called up her word processor and entered the changes. Total time required was 1 hour, 30 minutes. Several days later she was given the exact same document for translation by traditional methods. It took her 3 hours and 45 minutes to complete the job.

A television business news and current affairs program broadcast in several languages with scripts composed, translated, dubbed and/or sub-titled and all within three hours of the cut off time. Video tapes are then produced and the tapes shipped to international airlines for showing on their early morning business flights.

A specialist translation firm had so much work that they were obliged to sub-contract out 70% of their total workload (only taking a small commission on the work) prior to buying GTS. Within three months, and a considerable effort inputting their specialist glossaries and terms, they are now able to cope with all the demand without sub-contractors and still have capacity to spare.

An international company, one of whose departments developed systems for their European consulting divisions and translated program comments, technical specifications and manuals, now uses GTS and is able to do the same work for their world-wide network without an increase in staff. The whole translation process can be done between two and three times faster than before and with a number of translators in the department, consistency of terminology is retained.

GTS is therefore more appropriately described as a tool for 'Human Translating Support.'

THE SOLUTION

Computers are very good at some things. Humans are better at others. It seems logical therefore that the ideal partnership for the translation process is brains coupled with a little brawn – Man and Machine. Man can use the machine to get on with the boring part and leave his energy for the creative and fun part.

Requirements	Man	Machine
Intelligence	good	artificial
Style	lots of potential	n/a (yet)
Creative	artistic	n/a (yet)
Motivation	required	obedient
Limitations	needs tea breaks	24 hours per day
Reliability	subject to influence	as instructed

The Effort Required

In order to maximise on the efficiency of GTS substantial commitment of time and effort is required, specifically in the early days of its use. GTS dictionaries and term banks contain fairly broad translations and certainly no specialist glossaries, apart from those sold by GTS.

To ensure the most effective use of GTS the single word dictionary and semantic unit dictionary (terms) must be regularly updated and added to. There is no limitation to the additions that can be made (bar available hard disk).

A typical user scenario is as follows:

Prepare document for translation in ASCII (plain text) format - the source file	Scan the text and convert with OCR -or- Use your word processor to save the file in ASCII format -or- Receive the file by modem and convert to ASCII as applicable
Load the GTS	Type 'GTS'
Run the ASCII file through the GTS to produce: A draft target file An equivalence file	The equivalence file is alternate sentences in source and target language useful for post editing
Preliminary post edit of the target file or the equivalence file noting machine errors	Normally done on paper

Update the Single Word Dictionary for words not found or translated incorrectly	Within GTS
Update the Semantic Unit Dictionary for phrases and idioms not found	Within GTS
Re-run the source file through the GTS for a more refined translation	Within GTS
Import the target file into the word processor for final post editing and presentation	

An investment in time as well as money is required to ensure the most effective use of the tool.

GTS

GTS will run on any IBM compatible PC with 640K RAM, 12 Mb available disk space and DOS 3.1 or higher.

The following modules are now available:

French to English	English to French
Spanish to English	English to Spanish
German to English	English to German
Russian to English	English to Russian.

GTS is available in three basic formats:

GTS BASIC is designed for users who do not need different dictionaries for incorporating subject-specific terminology from a variety of fields.

- General dictionaries, over 60,000 terms
- Translation speeds around 20,000 terms per hour
- Interactive and batch modes
- Idiomatic expressions
- No limit to the number of terms added to the system
- Many other features.

GTS PROFESSIONAL is oriented toward business, professional and government translation programs and meets the most exacting standards in automated translation assistance.

As GTS BASIC but supports subject specific micro-dictionaries either supplied by GTS or user-defined.

Backup and restore facilities built in for dictionaries.

GTS IC CARD The full translation power of GTS BASIC without the ability to update the dictionaries on an IC (credit card sized ROM card for Hewlett Packard 95LX palmtop PC or compatible)

A Windows 3 integration module for GTS is to be marketed from February 1992.

Why GTS?

GTS provides a practical aid to translation problems where speed and cost effectiveness is of prime importance. GTS is the best machine translation tool available for PCs. GTS is a very cheap alternative to main-frame systems with comparable output. GTS can move with you on a portable. GTS has a very flexible integration with PC word processors and DTP. The relatively small investment in GTS can be recaptured in a matter of days when used conscientiously and intelligently.

AUTHOR

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