"The whisky was invisible", or Persistent myths of MT

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Scarcely a month goes by without somebody repeating the story of the MT system which translated the Biblical saying "The spirit is willing, but the flesh is weak" into Russian, which was then translated back as "The whisky is strong, but the meat is rotten". If this is not quite as you remember it then that is understandable. Perhaps you heard that the back translation was "The vodka is strong but the steak is lousy". Or maybe you heard that the language was not Russian, but German... or Japanese... or Chinese...

Often the story is told to show how poor the older approaches to MT can be, as in this press release promoting the new LMT system for PCs, the Personal PT, in October 1994:

Die Wort-für-Wort Übersetzungssysteme sind einfach damit überfordert, die Komplexität der menschlichen Sprache auch nur annähernd zu verstehen. So wird der Biblespruch "The spirit is willing, but the flesh is weak" (Markus 13.4) sinngemäß ins Russische übersetzt mit: "Der Whisky ist stark, aber das Fleisch ist faul."

[It is simply beyond word-for-word translation systems to understand the complexity of human language even approximately. Thus the Biblical saying 'The spirit is willing, but the flesh is weak' is translated into Russian as the equivalent of 'The whisky is strong, but the meat is rotten'.]

Workers in artificial intelligence have also used the example. Elaine Rich (Artificial intelligence. New York: McGraw-Hill, 1984) describes one of the problems of MT systems which do not understand text and translate 'meaning' as an inability to deal with idioms (p.341):

An idiom in the source language must be recognized and not translated directly into the target language. A classic example of the failure to do this is illustrated by the following pair of sentences. The first was translated into Russian, and the result was then translated back to English, giving the second sentence:

1. The spirit is willing but the flesh is weak
2. The vodka is good but the meat is rotten.

As these extracts show, MT and AI researchers have cited this 'howler' to illustrate problems of ambiguity and lexical selection which are supposedly typical of older 'word-for-word' or 'direct translation' systems and which their own systems are presumably able to deal with successfully.

There is of course no hint in these quotations that the example may not be anything other than a genuine output from an MT system. This is characteristic; the example is used to illustrate a weakness of some unnamed 'earlier' system.
Nearly always when the story is repeated there is no suggestion that it might be apocryphal. Admittedly, some writers have shown doubts. Isidore Pinchuk (*Scientific and technical translation*. London: Deutsch, 1977) in his chapter on machine translation writes (p.241):

> It has often been said that a computer is an idiot, and many examples of its imbecility (probably apocryphal) have been given. 'The ghost is a volunteer but the meat is tender', an alleged computer translation of *der Geist ist willig, aber das Fleisch ist schwach*, underlines the fundamental problems inherent in MT...

The initial source for many of the recent versions of this MT howler may well be an article in the influential and widely read *Harper's Magazine*. In August 1962, John A. Kouwenhaven wrote an article "The trouble with translation", which included the following paragraphs:

> Our own attempts to communicate with the Russians in their language may be no more successful. Thanks to Robert E. Alexander, the architect, I can pass along this cheering bit of news. According to Colonel Vernon Walters, President Eisenhower's official interpreter, some electronic engineers invented an automatic translating machine into which they fed 1,500 words of Basic English and their Russian equivalent, claiming that it would translate instantly without the risk of human error. In the first test they asked it to translate the simple phrase: "Out of sight, out of mind." Gears spun, lights blinked, and the machine typed out in Russian: "Invisible Idiot."

> On the theory that the machine would make a better showing with a less epigrammatic passage, they fed it the scriptural saying: "The spirit is willing, but the flesh is weak." The machine instantly translated it, and came up with "The liquor is holding out all right, but the meat has spoiled."

This account has all the appearance of genuineness. It was well known at the time that much research on MT was going on in the United States and that Russian was the main language of interest. It is, therefore, not surprising that many believed it to be true and so repeated it.

However, there is no evidence of a system of the kind described was in existence in the early 1960s; after all, the Americans were concerned not with translating into Russian but with translating technical and military documents from Russian. And why should the system be restricted to Basic English? It would have taken just a little knowledge of Russian, or indeed of any language other than English, to throw doubts on its authenticity. While *flesh* could well be back-translated as *meat*, and *spirit* could conceivably come out as *liquor*, how could anyone believe that *willing* was translated as the equivalent of *holding out* and *weak* as *spoiled*?

Fortunately we do not have to tax our brains to work out how this MT program might have produced such 'howlers', since both were already known some years before.

In February 1958, A.G.Readett gave a brief account of a lecture (*Linguists' Review*, NS vol.1 pt.2, p.27-28) on progress in research on a French-English
A Firm experimenting with an electronic brain designed to translate English into Russian fed it with the words: "The spirit is willing but the flesh is weak."

The machine responded with a sentence in Russian characters which was handed to an expert linguist.

"It says," he reported, "that the whisky is agreeable but the meat has gone bad."

But why was this particular saying chosen? As it happens two years earlier in April 1956, a lecture was given at the Institute of Electrical Engineers on the "computer in a non-arithmetical role", and MT was mentioned as one potential application. In the subsequent discussion, one of the participants E.H.Ullrich may have been the unwitting originator:

Mechanical translation will surely come, and I welcome the attempts at it now being made. I feel, however, that most of the workers in this field underestimate by a factor of ten the difficulty of producing a useful and truthful translation as opposed to a novelty for amusement only. They appear to think that dictionaries and grammars together contain substantially all that is required for the purpose. In serious matters this is usually not so. Before the war, I lived for a number of years in Paris and found the standard of translation in the Press poor. Perhaps the popular Press is the most attractive outlet for mechanical translations, because it does not really matter whether these are right or wrong, and amusing versions such as 'the ghost wills but the meat is feeble' might make mechanical translation into a daily feature as indispensable as the cross-word puzzle. ...

It is surely ironic that a joke by journalists about incompetent human translators should be used, in all seriousness, to show how poor computers can be in comparison with human translators.

Interestingly, the talks which gave rise to the apocryphal story and to Ullrich's comment were both given by the pioneer MT researcher Andrew Booth, who himself revealed the antiquity of that other MT perennial "Invisible idiot". In a review of a report of Lamb's MT system for Chinese-English translation (Nature, 200 (2 November 1963): 392-393) entitled Invisible lunatic, he wrote:

The second of the objectives, that of assembling all the Chinese characters in modern use, is more difficult an assessment and suggested the title of this review. There is an old (and probably apocryphal) story that a certain computer was asked to translate "Out of sight, out of mind" into Chinese and that a second machine later performed the reverse process, producing as a result the words of the title of this review. The point of the story is that, although telegraphic entries nos. 4035, 4045 and 4082 are associated with madness and imbecility, neither the word lunatic nor invisible seems to appear in the list...

The late Margaret Masterman (another MT pioneer) used to say that this particular
mistranslation was frequently to be found in elementary textbooks for learning Chinese as a warning against just such a careless use of character dictionaries that Booth was describing.

Like the Biblical saying, this story too persists, appearing sometimes in most unexpected places, as illustrated by the following extract from a British provincial newspaper (*Eastern Daily Press*, December 19, 1987):

> Computers will never take over... Citing evidence for this re-assuring proposition, Benedict Cadbury, factory manager of UB Frozen Foods, Fakenham, quoted to his audience a story of how a computer was programmed to translate English into Japanese. "Out of sight, out of mind" was the task set the machine. Out came an impressive Japanese print-out, followed by the acid test, a re-translation into English. The result was a two-word precis: "Invisible idiot".

If nothing else, this should serve as a warning not to believe everything read in newspapers. MT has suffered repeatedly from misleading journalism - examples were given in MTNI#8 of the wild exaggerations in reports of the IBM-Georgetown experiments. It may be difficult for the MT community to combat such stories since they have undoubted humour and memorableness, and since they are sometimes believed even by those involved in the field. However, there are surely more than enough true MT 'howlers' which could be cited - such as the translation of *les enfants et les femmes enceintes* as *pregnant children and women* - without the need to resort to those which are known to be apocryphal.

[Afterword (May 2003):

This article was written in 1995 before the appearance of online MT services, and at that time (and in previous years) these howlers were often used in critiques of MT as if they were actual outputs of systems. Nowadays such examples can be readily generated by any users of online MT systems. The point of this article was that the stories attributing such howlers to systems of the 1970s and earlier were apocryphal. The attributions were mistaken then and they still are.]