Can experimental translation studies offer something to practising translators?

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Summary

This paper looks at the potential implications of experimental translation research to practising translators. The paper begins by a short introduction of the methods used in data elicitation. Some of the findings of experimental studies are then discussed, with a focus on the findings which appear to have something to offer practitioners. These include evidence showing that translating does not occur automatically even by professional translators. More importantly, some recent studies indicate that expert translators' processing exhibits features similar to expert processing in other fields, which could be used to raise the profession's profile and to boost the field's image.

Translation studies can be defined as the field of research dedicated to describing and explaining all the phenomena related to translating and translation (Koller 1971 quoted in Holmes 1988). While the study of (written) translations has a long history, the empirical (experience-based) and experimental (drawing on data elicited in controlled experiments) study of translating, i.e. the process of producing translations, emerged in the early 1980s.

The experimental study of translation has a great deal to offer to the theory and teaching of of translation. Systematic empirical study allows us to have a more thorough understanding of what translating involves, when we have first-hand knowledge of the thought processes and working methods involved. The research evidence about the nature of translating should contribute to refining the existing theories and models of translation, and to creating new ones. Evidence from process research is also important for translator training – by looking at successful professional translating, we can try to transmit successful behaviours to our students who are, after all, the future practising translators. However, it can be asked whether process research can offer anything to practising translators who have developed their own views and theories of translation as well as their own tried and tested translation methods and strategies. This paper attempts to show that experimental research has found out things that may be of interest to practising translators as well. Ultimately, of course, it is up to the translators themselves to decide whether experimental translation research does offer something to them.

Methods

The translation process has been discussed in translation theory and research much longer than it has really been researched. Traditional theory consisted of translators' and scholars' views and principles about the best way to translate, while the empirical and experimental research, which looks at what translators actually do when they translate, dates back to the 1980s. Process researchers can elicit research material by various methods: translator journals or diaries, translator interviews as well as think-aloud or retrospective reports or

computer logging. This paper focuses on the experimental methods; thinking aloud, retrospection and computer logging.

Thinking aloud and retrospection are methods of data elicitation which have been borrowed from cognitive psychology. They are also often referred to as ʻverbal report procedures'. Thinking aloud means concurrent verbalisation (subjects externalise their thoughts during the task performance) whereas retrospective reports are collected after the task performance. Both methods have their advantages and disadvantages. Only thought processes which take place at the conscious level can be verbalised either concurrently or retrospectively; therefore the verbalisations can never reveal all of the thought processes. Thinking aloud may interfere with the task at hand; in Jakobsen's study (2003), thinking aloud slowed down the translation process and decreased the size of segments (chunks of text) translators worked with. Retrospection, in turn, is vulnerable to memory distortions; the longer the time gap between task performance and retrospection, the larger the likelihood of memory failure, which can result in the subject guessing and rationalising about their reasons for doing something. Despite their limitations, verbal reports on translating offer interesting glimpses to what individual translators think and feel when they translate. Making larger groups of subjects perform the same task allows researchers to identify inter-individual tendencies.

Ideally, thinking aloud should be spontaneous, externalised thinking, not a detailed analysis provided by the subject. Obviously, sometimes subjects tend to resort to showing off their own expertise. Example (1) below shows what thinking aloud ought to look like. The excerpt is from a professional translator's think-aloud protocol (TAP) when she is translating a source text (ST) phrase ʻ*the amount of cholesterol accumulated in blood, liver and kidneys*' into Finnish. The subject is simply weighing different nearly synonymous expressions ('*rose, grew, increased*') in Finnish. The figures in brackets indicate the length of pauses in seconds; the verbalisation has been translated into English; the italicised words were in English in the original.

(1)   the amount of (2.0) cholesterol (2.0)
          rose increased (4.0) the amount (.) rose (.)
          the amount rose grew increased (1.0) the amount of cholesterol (1.0) rose (2.0)
          accumulate (1.0) rose (2.0)
          (Jääskeläinen 1999) .

Example (2) illustrates the way in which professional translators in particular sometimes start showing off their knowledge. Here the subject is another professional translator who is working on the ST sentence "*Alternatively, garlic may nobble the energy-carrying compound NADPH which is necessary for making lipids.*" She decides that the relative clause should be moved and turned into a premodifier. In her TAP, she first talks about "moving the last relative sentence to the beginning". After discussing her reasons, she talks about "trying to make it a premodier". Such terminological self-correction would seem unlikely as genuine ʻinner speech' or externalised thought; it is clearly intended for an audience.

(2)   that has to be moved the last one (1.0)
          the relative clause to the beginning
          otherwise there will be such an insanely long modifier there
          and then this which is necessary for making lipids (2.0)

that must be moved now
absolutely try to make it a premodifier
(Jääskeläinen 1999).

Even though the kind of 'embellishment' of the translator's thoughts shown in example (2) may not be desirable, it does offer interesting insights into the way in which the translator wishes to portray herself as a representative of her profession. The professional in this example was clearly concerned about her professional image throughout her translation process. The task in the experiment was outside her comfort zone, yet she performed successfully, partly as a result of her persistence to be a credit to her profession.

In the 1990s, the TRAP project (Translation Process) at the Copenhagen Business School introduced and tested a research software called *Translog* (Jakobsen 1999, 2000). The program logs all keyboard activities (corrections, back- and forward shifts, pauses) and provides statistics on them. The logs are often combined with think-aloud or retrospective reporting. *Translog* also has a replay function which is very useful for retrospection; the subject can follow his or her own process and provide retrospective verbalisations on problematic parts. Computer logging offers another, 'hard' or quantitative, source of data, which makes research evidence more convincing and reliable. The TRAP project also introduced the idea of 'triangulation', i.e. collecting data from a variety of sources to yield a more comprehensive picture of the phenomenon under investigation.

Findings

Experimental studies have yielded results which have confirmed earlier views as well as refuted some of them. The findings which support the conventional wisdom in the field include that critical attitude to bilingual dictionaries is advisable and that high-quality translation requires understanding the source text as well as paying attention to the needs of the target text readers. These are illustrated by examples (3) to (4) which deal with translating the expression 'a dicky heart'. Example (3) shows the way in which a non-professional (a physician) takes the equivalents offered by the bilingual dictionary at face value: the list of equivalents is *the* set of alternatives from which she has to choose one – which she does, with poor results. In example (4), a fifth-year translation student first laughs at the equivalents listed in the bilingual dictionary, spends some time thinking about what to do, and then comes up with a comprehensible and idiomatic colloquialism which is perfectly acceptable here.

(3)　　especially if you have a dicky heart (.)
　　　　especially if you have a fatt- (.) thick heart (5.0)
　　　　I'll look if this word DICK has some some (.) more specific meaning in
　　　　medicine (4.0) [**checks 'dicky' in a bilingual dictionary**]
　　　　if this dictionary would give (1.0) something else than the word thick (17.0)
　　　　(()) (.) E Y (1.0) DICKY (2.0) back-seat of a car and spare-seat and (1.0)
　　　　donkey and (2.0) bib and (1.0) adjectives are bad rotten (.)
　　　　oh right it's not at all thick but it's bad and rotten unstable staggering so a bad
　　　　heart (5.0) especially (3.0) if you have (2.0)
　　　　perhaps that unstable would be like most appropriate there
　　　　staggering and unstable and (1.0) an unstable heart (.) a staggering heart (3.0)
　　　　staggering would seem quite (2.0) quite a good word (1.0) it would say

something to a patient too that a staggering heart (.) unreliable (.)
(Jääskeläinen 1999).

(4)   now let's check it here [**checks 'dicky' in a bilingual dictionary**] (1.0)
        this one (10.0) and it does not know as expec- (4.0)
        ah it does know (3.0) says bad rotten and staggering
        unstable unstable heart (laugh) right (7.0)
        everyone knows that it is not good to eat (.) fatty foods (3.0) especially (9.0)
        especially if your heart tends to be on the blink
        let's put it like that (58.0)
        yes (.) you could say (.) say so on that column
        although perhaps not elsewhere [in the target newspaper] (2.0)

What is interesting in example (4) is, first, the student's critical attitude towards the information offered by the bilingual dictionary. In addition, after rejecting the dictionary equivalents, she resorts to the draft translation she has produced so far. She reads it aloud, thinks for a while and then comes up with a nice solution. After writing the sentence down (the 58-second pause), she justifies her choice by explicitly referring to the target column, which indeed allows more colloquial expression.

Both practitioners and teachers of translation have of course known such things on the basis of their own experiences. Nevertheless, supportive evidence from systematic research increases the credibility of these views, which can be crucial in negotiations with authorities (employers, educational bodies etc) outside the field. This is particularly important in our field the existence of which seems to be repeatedly questioned.

Research has also helped identify translation students' typical problems, which can be exploited to improve the teaching of translation (e.g. Livbjerg and Mees 2005). Hansen (2006) has identified various sources of disruption (*Störquellen*) in translation students' processing. These include low self-confidence, obsessive attention to detail, misguided priorities, inability to solve comprehension problems, lacking control mechanisms, and fear of interference. This kind of information is difficult to pin down by looking at the translation product only and might also be hard to elicit in classroom discussions. Yet these are factors which could seriously harm the development of translation competence if nothing is done about them.

Automatised processing and expertise

Some of the findings listed above may seem rather irrelevant to experienced translators who have learnt their own lessons about the reliability of bilingual dictionaries, for example, or found the translation strategies which suit their needs at work. However, there are (at least) two findings which may have a special significance to practising translators; one is related to the assumed automaticity of professional translation processes, and the other deals with translation as expertise.

It is (or *was*) generally assumed that for professional translators the translation process is largely automatised and subconscious, hence also inaccessible to verbal reporting. As a result, some of the first experimental studies (Krings 1986; Lörscher 1986) used language students or translation students (Tirkkonen-Condit 1989; Jääskeläinen 1987) as subjects, as it

was assumed that professionals would not able to verbalise anything. Indeed, Séguinot's (1989) case study with a professional translator seemed to support the automaticity hypothesis: the Canadian government translator worked fast, hardly pausing to think, and verbalised little. However, the findings from Gerloff (1988), Krings (1988) and Jääskeläinen (1990) pointed to a different direction: professionals identified more problems and often also verbalised more than non-professionals. In fact, Gerloff dubbed her finding as the "translation-does-not-get-easier" phenomenon.

A closer comparison of the contradictory findings showed that the amount of professional translators' processing and verbalising activities also depends on the kind of task they are performing: Séguinot's professional was doing a routine task, while the other professionals were challenged with a novel, non-routine task. Combined with findings from students' performance, we can posit a developmental hypothesis: non-professionals tend to be blissfully ignorant of potential translation problems, while increasing experience with translation results in increasing sensitivity to potential problems. Finally, professionals are able to shift between fast and virtually automatic processing in routine tasks and more arduous, conscious processing in non-routine tasks. Students can thus be reassured that translation does in fact get easier in some respects. On the other hand, as languages and cultures change and evolve, there are always new challenges. Consequently, there can never be 'a fully fledged translator' in the sense that everything has been mastered to perfection. It can also be speculated that different fields of translation allow different levels of automaticity or routineness: for example, software localisation seems likely to become fairly routine, while literary translation might never become routine. These hypotheses have not yet been studied systematically.

More recently, expertise in translation has received increasing attention (see e.g. Englund Dimitrova 2005; Shreve 2007). Expertise research also originates from cognitive psychology, where research has focused on identifying features of expertise in writing, chess, judicial decision-making, and diagnosing X-ray pictures (see Chi et al. 1988). 'Expertise' can be defined in various ways, which can be useful in translation studies as well. Furthermore, different kinds of expertise can also help make sense of the uncomfortable findings that professional translators do not always perform well in experimental conditions.

'Expertise' has been defined as, for example, the result of 10 years or 10,000 hours of experience with a task or a skill (e.g. tennis) (e.g. Glaser /Chi 1988). On the other hand, expertise can also be defined as consistently good performance (e.g. Bereiter /Scardamalia 1993). Hatano /Inagaki (1992) distinguish between 'routine experts' and 'adaptive experts'. Routine experts are good at applying acquired procedures in familiar situations, while adaptive experts are able to solve new problems and 'develop new conceptual understanding' of their field of expertise (= domain).

Now, using the above distinctions would help translation studies to correctly identify with which kind of expertise a particular piece of research deals. The experience-based definition leaves out the question of the quality of performance, and there are of course *professional* translators (i.e. people who earn their living by translating) out there who do not necessarily turn out high-quality translations (due to lack of time, resources or education). In terms of research design, it is important to decide what kind of experts we want to study, because it influences subject selection.

The distinction between routine and adaptive experts may also explain some of the findings in process research. In Jääskeläinen (1999), one of the professionals (defined as earning their living by translating) failed miserably in the experimental task, although she had been working in an export company doing translations for more than ten years. The experimental translation task was clearly non-routine for her, yet she applied her routine working methods to it. On this basis, she might be tentatively characterised as a routine expert, although we would naturally need more research evidence to conclude that definitely.

Glaser /Chi (1988) have listed several features of expertise. These include: experts spend proportionately more time on analysing the task; experts excel in their own domains; and experts work with larger chunks. By analysing micro-level (within target-text production) pauses and segmentation from expert translators' *Translog* files, Jakobsen (2005) was able to identify similar features of processing: experts spent more time on initial orientation and end revision and worked with longer units than novices. Translation experts also have superior speed potential, materialising in instances of peak performance.

Sirén and Hakkarainen's (2002) findings also show that translation experts excel in their own domains. In their study, they combined three kinds of expertise by using two kinds of translation experts (two literary and two medical translators) as well as non-experts in translation (two experts in medicine) as subjects. In the experiment, the subjects were asked to translate two texts, a literary and a medical text. The results show that good medical translators are not good literary translators, and vice versa, which means that translational expertise is also domain-specific. This finding may seem trite and self-evident to the translation studies community and, indeed, to practising translators. However, the finding may be relevant in negotiations to convince prospective commissioners to hire a specialised translator. More importantly, underlining the nature of translating as an expert profession could serve to boost the image of the profession.

In conclusion, to my mind the most important finding of experimental translation studies has been to highlight what a cognitively challenging and complicated task translating is. Consequently, it has become more and more difficult to understand how little translation is appreciated. Therefore the recent findings which point to the similarity of translational expertise to, say, expertise in law or medicine seem particularly significant. They mean that translating is not a mechanical code-switching operation and that professional translators are not automatic translating machines. Process studies have also shown that translation competence is not an automatic by-product of language competence. The similarities between experts in law or medicine invite other analogies as well – lawyers do not carry all the necessary information in their heads but consult reference books, just as translators do. These research results and analogies to other fields of expertise could and should be used to raise the profile and status of our deplorably unappreciated field.

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