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# ACQUIRING TRANSLATION COMPETENCE: HYPOTHESES AND METHODOLOGICAL PROBLEMS OF A RESEARCH PROJECT

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# Introduction

The empirical-experimental approach is relatively new in translation studies and this lack of tradition makes it very difficult to set up an empirical research project. The natural sciences, and more recently, the social sciences, can rely on established theoretical and methodological criteria, whereas in translation studies we cannot. There is little consensus on how to formulate working hypotheses, design experiments, choose subjects, define experimental and control groups, control random variables, and so on. Perhaps the most difficult problem is how to create reliable instruments to measure the parameters we are interested in and to provide data for analysis.

Despite the difficulties, some empirical studies have been carried out and some isolated hypotheses have been confirmed. In our opinion, these studies are important for three main reasons. They have opened up new perspectives to understanding translation competence and performance, the area of translation studies that is most closely linked to psychology. They have tested some instruments to measure this competence. They have confirmed some earlier intuitions about it, e.g., the translation process is not lineal but recursive, strategies play a decisive role in the process, procedures vary significantly according to the individual, the text, or directionality.

In our project we are building on this pioneer research, working in three related areas: (1) translation competence, (2) the acquisition of translation competence, and (3) teaching proposals to develop and evaluate translation competence. This article summarises our theoretical and working hypotheses and suggests some of the methodological problems involved in studying such a highly complex phenomenon.

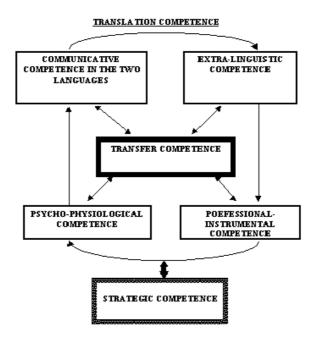
# A holistic and dynamic model of translation competence

Translation competence can be defined as the underlying system of knowledge and skills needed to be able to translate. This competence is actualised in different ways in different situations. The concept itself, borrowed from the idea of linguistic competence, has become increasingly important in translation studies as behaviourist paradigms have been replaced by cognitive paradigms. The three main issues are (1) the components of translation competence, (2) its nature, and (3) how it is acquired.

#### The Components of Translation Competence

Just as increasingly detailed models have been developed for linguistic competence, so componential models have been proposed for translation competence. As they are all based on observation of the translator's behaviour, there is agreement about some basic components, such as, bilingual competence, transfer competence, world or subject knowledge (Bell 1991; Wilss 1992; Beeby 1996; Hurtado 1996; Presas 1996; Shreve 1997, among others). Furthermore, it seems obvious that if the translation process is building a target text (TT) from a source text (ST), translators will always be detecting and solving new problems of a linguistic nature (Krings 1987; Bélanger 1992; Demers 1992; Mondahl and Jensen 1992). Depending on the type of text they are working with, translators will use special subject knowledge (Schäffner 1993; Dancette 1994) and different tools, such as dictionaries or databases (Fraser 1994). Translators are able to do all this, efficiently, without losing sight of their objectives.

However, various studies seem to show the existence of two further types of sub-competencies. The first is related to specific problem-solving strategies (Krings 1986, Lörscher 1991,1992, 1993; Kussmaul 1991, 1995; Wilss 1992; Kiraly 1995). The second is related to certain psychological qualities and skills that translators draw on, such as creativity (Kussmaul 1995), emotion (Tirkkonen-Condit) or attention span (Jääskeläinen 1993). Therefore our model of translation competence includes a problem solving or strategic component and a psycho-physiological component, as can be seen in figure 1.



# Fig.1. The Sub-components of Translation Competence

1. Communicative competence in two languages can be defined in general terms as the system of underlying knowledge and skills necessary for linguistic communication. Following Canale (1983), we distinguish linguistic, discourse and socio-linguistic components. Of course, for translators, this competence should be separated into understanding in the SL and production in the TL.

2. Extra-linguistic Competence is composed of general world knowledge and specialist knowledge that can be activated according to the needs of each translation situation. The sub-components may include explicit or implicit knowledge about translation, bicultural, encyclopaedic and subject knowledge.

3. Instrumental-Professional Competence is composed of knowledge and skills related both to the tools of the trade and the profession. The sub-components may be very diverse: knowledge and use of all kinds of documentation sources and new technologies, knowledge of the work market (translation briefs, etc.) and how to behave as a professional translator, especially in relation to professional ethics.

4. Psycho-physiological Competence can be defined as the ability to use all kinds of psychomotor, cognitive and attitudinal resources. The most important of these may be psychomotor skills for reading and writing; cognitive skills (e.g. memory, attention span, creativity and logical reasoning); psychological attitudes (e.g. intellectual curiosity, perseverance, rigour, a critical spirit, and self-confidence).

5. Transfer Competence is the central competence that integrates all the others. It is the ability to complete the transfer process from the ST to the TT, i.e. to understand the ST and re-express it in the TL, taking into account the translation's function and the characteristics of the receptor. The sub-components include (1) comprehension competence (the ability to analyse, synthesise and activate extra-linguistic knowledge so as to capture the sense of a text), (2) the ability to "deverbalise" and to maintain the SL and the TL in separate compartments (i.e. to control interference), (3) re-expression competence (textual organisation, creativity in the TL), (4) competence in carrying out the translation project (the choice of the most adequate method).

6. Strategic Competence includes all the individual procedures, conscious and unconscious, verbal and non-verbal, used to solve the problems found during the translation process. The problem-solving process can be described as a series of acts or recursive, complex acts that lead from an initial state to an objective. There are several stages in this process, the first of which is recognising there is a problem (Sternberg 1996). Examples of strategies are: distinguishing between main and secondary ideas, establishing conceptual relationships, searching for information, paraphrasing, back translating, translating out loud, establishing an order for documentation, etc.

# The Nature of Translation Competence

The nature of translation competence is at the heart of another current debate in translation studies. Is it eminently theoretical or practical, conscious or automatic, declarative or operative? Anderson (1983) defines declarative knowledge as *knowing what*. It is easy to verbalise, you have it or you do not have it, it is explicitly defined and its processing is essentially controlled. On the other hand, he defines operative knowledge as *knowing how*. It is difficult to verbalise, it can be partially possessed, it is acquired gradually, through practice and its processing is essentially automatic. One type of knowledge does not exclude the other, they may co-exist or, in a learning

situation, as novice becomes expert, declarative knowledge may give way to operative knowledge. This idea was taken up by Dreyfus and Dreyfus (1986), who characterised expert knowledge as non-reflective (*idem*: 36) and claimed that if rational thought took place at all, it would be a "critical reflection about one's own intuitions" (*idem*: 32).

In the field of introspective translation studies, the automatic or non-reflective nature of expert, operative knowledge is illustrated by the difficulties expert translators have in verbalising their mental processes (Kiraly 1995). This has led us to consider translation competence as essentially operative knowledge, in which the strategic component is primordial.

# Acquiring Translation Competence

If translation competence is made up of inter-related sub-competencies, then its acquisition is a dynamic process of building new knowledge on the basis of the old. What may be most important in the process is the restructuring of existing knowledge, rather than the addition of new information (Pozo 1996). Thus, the novice stage in the development of translation competence could be defined as the stage when the sub-competencies have been acquired, at least partially, but they do not interact with each other. Therefore, the development from novice to expert is not only a question of acquiring the missing sub-competencies, but also of re-structuring the existing sub-competencies to put them at the service of the transfer competence.

In order to acquire translation competence, the student also has to develop a learning competence that includes the specific learning strategies that make this and any learning process possible. These strategies are the "system of plans and operations used by someone who learns something to obtain, store, recover and use information" (Manchón 1994).

Figure 2 shows the main characteristics of this process.

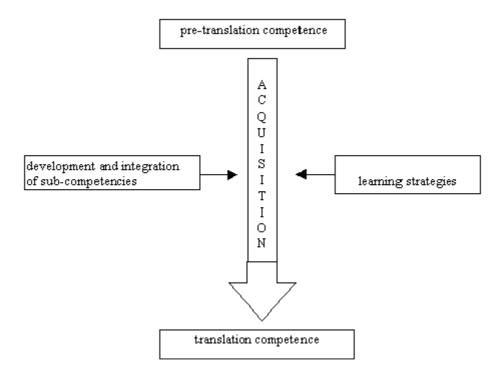


Fig. 2. Acquiring Translation Competence.

# Hypotheses

In order to investigate translation competence and its acquisition using the above models, we have formulated the following theoretical and working hypotheses.

The theoretical hypotheses related to translation competence are that translation competence is a system of sub-competencies that are (1) interrelated, (2) hierarchical, (3) used in every translation act and (4) whose interrelation and hierarchy are subject to variations. The working hypotheses are as follows. (1) The sub-competencies of translation competence are communicative, extra-linguistic, professional-instrumental, transfer, strategic and psycho-physiological. (2) Transfer competence plays a central role in the hierarchy of sub-competencies. (3) The interaction between the sub-competencies is controlled by strategic competence. (4) The interaction and hierarchy of the sub-competencies vary according to directionality (direct or inverse translation), language combinations, specialisation (literary, legal, technical translation, etc.), the translator's experience or the translation context (translation brief, time available, financial conditions, etc.).

The theoretical hypotheses related to acquiring translation competence are that it takes place through a process of restructuring and developing sub-competencies (1) which do not develop in parallel, (2) are interrelated, (3) specific learning strategies are required and (4) the process is subject to variations. The working hypotheses are as follows: (1) the development and re-structuring of transfer competence is central to the acquisition of translation competence, (2) the acquisition and the development of strategic competence are essential to develop and re-structure the other sub-competencies, (3) the development of specific learning strategies is necessary to develop and re-structure the other sub-competencies, (4) the development and re-structuring of the other sub-competencies varies with certain factors: directionality (direct or inverse translation), language combinations, specialisation (literary, legal, technical translation, etc.), or the learning context (guided learning, self learning, etc.).

The next stage in our research is to reformulate these working hypotheses as empirical ones so that they can be applied to observable behaviour and measured. Only by doing this can we obtain data that will allow us to validate or refute the above hypotheses.

# The Problems of Empirical-Experimental Research

Empirical research in translation studies has to follow the same stages as empiricalexperimental research in any other field. These stages are shown in Figure 3 below.

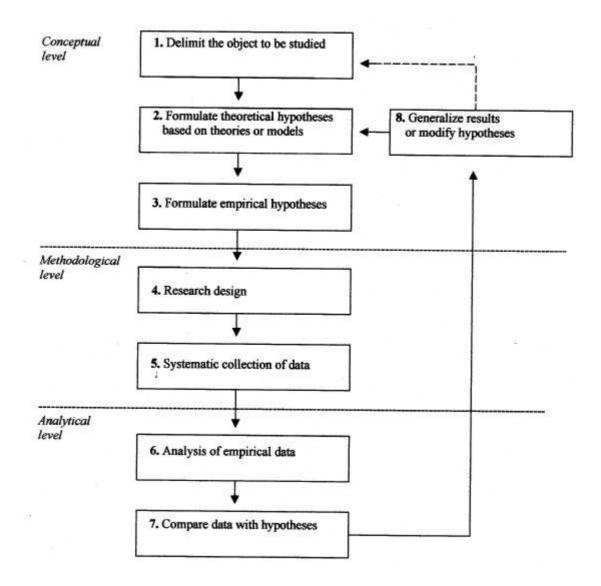


Fig.3. Research Stages (adapted from Arnau 1995)

Given that all sciences follow practically the same criteria at the conceptual and analytic stages, here we will briefly mention some of the methodological problems we have in translation studies.<sup>1</sup>

The first problem is how to define the extraordinarily complex dependent, independent and random variables that affect the reliability and internal and external validity of our study. The variable we want to measure in one experiment may be a random variable in another experiment. For example, extra-linguistic competence may act as a random variable when analysing instrumental competence.

The second problem is related to measuring instruments. Certainly, there is very little experience to build on. So far, the most common instruments have been tests (problems of reliability, repetition, objectivity and control of random variables), questionnaires and interviews (problems of objectivity and validity: these *post facto* methods do not assure one is measuring what one set out to measure) and TAPs (problems of situational validity). Furthermore, measuring the acquisition of the different sub-competencies is complicated by the very diverse learning methods used (learning by doing, imitation, cognitive processes, etc.). Therefore, one of our main tasks is to develop a whole battery of new instruments to take precise, reliable measurements.

The third problem is how to analyse the data. Here we have to elaborate a system that will allow us to transform into quantitative data, information that is, by its very nature, qualitative (bicultural, encyclopaedic, professional knowledge, etc.) This means we have to make a difficult choice. Either we force our data into a numerical straitjacket to apply inferential methods and risk that the results obtained do not

<sup>&</sup>lt;sup>1</sup> For a further discussion of the criteria required in translation research, see W. Neunzig's contribution in this volume.

represent reality, or, we limit ourselves to descriptive statistics and end up with results that lack the explicative power we need.

# References

ANDERSON, J.R. (1983) *The Architecture of Cognition*, Cambridge: Harvard University Press BEEBY, A. (1996) *Teaching Translation from Spanish to English*, Ottawa: Ottawa University Press.

BÉLANGER, G. (1992) Étude des relations cohésives grammaticales: perspectives traductologiqe et typologique, Tesis doctoral, Universidad de Sherbrooke

BELL, R.T. (1991) Translation and Translating, Londres: Longman

CANALE, M. (1983) "From communicative competence to communicative language pedagogy", en J.C. Richards y R.W. Schmidt (eds.) *Language and Communication*, Londres: Longman ("De la competencia a la pedagogía comunicativa del lenguaje", en M. Llobera et al. *Competencia comunicativa*, Madrid: Edelsa, 1995)

DANCETTE, J.(1995) Parcours de Traduction: Etude expérimentale du processus de compréhension, Presses Universitaires de Lille

DEMERS, G. (1992) "Les statistiques au service de la pédagogie de la traduction", TTR, 5,1

DREYFUS, H.L. y S.E.DREYFUS (1986) Mind Over Machine, Oxford: Blackwell

FRASER , J. (1994) "Translating Practice into Theory: A Practical Study of Quality in Translator Training", en C. Picken (ed.) *ITI Conference 7 Proceedings*, Londres: Institute of Translation and Interpreting

FRASER, J. (1996) "The Translator Investigated. Learning from Translation Process Analysis", *The Translator*, 2, 1, 65-79

HÖNIG, H. (1988). "Wissen Übersetzer eigentlich, was sie tun?" *Lebende Sprachen* 33 (1): 10-14.

HURTADO ALBIR, A. (1996) "La cuestión del método traductor. Método, estrategia y técnica de traducción", *Sendebar*, 7: 39-57.

JÄÄSKELÄINEN, R. (1993) "Investigating Translation Strategies", en S. Tirkkonen-Condit y J. Laffling (eds.) *Recent Trends in Empirical Translation Research*, Universidad de Joensuu

KIRALY, D.C. (1995) Pathways to Translation, The Kent State University Press

KRINGS, H.P. (1986) Was in den Köpfen von Übersetzern vorgeht, Tübingen: Gunter Narr

KUSSMAUL, P. (1991) "Creativity in the Translation Process: Empirical Approaches", en K.M. van Leuven y T. Naaijkens (eds.) *Translation Studies: The State of the Art*, Amsterdam: Rodopi

KUSSMAUL, P. (1995) Training the Translator, Amsterdam: John Benjamins

LÖRSCHER, W. (1991) Translation performance, Translation process, and Translation strategies, Tübingen: Gunter Narr Verlag

LÖRSCHER, W. (1992) "Investigating the ranslation Process", Meta, 37, 3

LÖRSCHER, W. (1993) "Translation Process Analysis", en Y. Gambier y J. Tommola (eds.) *Translation and Knowledge*, Universidad de Turku

MANCHÓN R. (1994) "Las estrategias del aprendiz de una L2: el estado de la cuestión", en *Serie sobre estrategias de aprendizaje y uso del lenguaje*, Universidad de Sevilla, 7-17

MONDAHL, M. and A. JENSEN (1992) "Information Processing in a Translation Task", *Multilingua*, 11, 2

PRESAS, M. (1996) Problemes de traducció i competència traductora. Bases per a una pedagogia de la traducció, Tesis doctoral, Universitat Autònoma de Barcelona

SCHÄFFNER, C. (1993) "Meaning and Knowledge in Translation", en Y. Gambier y J. Tommola (eds.) *Translation and Knowledge*, Universidad de Turku

SCHÖNPFLUG, U. (1994) "Sprache und Kultur" in Wessel, K and F. Naumann Kommunikation und Humantogenese. Bielfeld: Kleine, 370-383.

SHREVE, M.G. (1997) "Cognition and the Evolution of Translation Competence", en J.H. Danks et al (eds.) Cognitive Processes in Translation and Interpreting, Thousand Oaks: Sage.

STERNBERG, R.J. (1996) Cognitive Psychology. Fort Worth, etc.: Harcourt Brace.

TIRKKONEN-CONDIT, S. (1989) "Professional Versus Non-professional Translation: A Think-aloud Protocol Study", en C. Séguinot (ed.) *The Translation Process*, Toronto: H.G. Publications

TIRKKONEN-CONDIT, S. (1992) "The interaction of World Knowledge and Linguistic Knowledge in the Processes of Translation. A Think-Aloud Protocol Study", en B. Lewandowska-Tomaszczyk (ed.) *Translation and Meaning*, Maastricht, Faculty of Translation and Interpreting

WILSS, W. (1982) The Science of Translation. Tübingen: Gunter Narr

WILSS. W. (1992) Übersetzungsfertigkeit. Annäherungen an einen komplexen übersetzungspraktischen Begriff. Tübingen: Gunter Narr.