



Translation | Research | Empiricism | Cognition
Thematic Network on Empirical and Experimental Research in Translation
Red temática de investigación Empírica y Experimental en Traducción

SEMINAR ON EMPIRICAL AND EXPERIMENTAL RESEARCH IN TRANSLATION

**Facultat de Traducció i d'Interpretació
Universitat Autònoma de Barcelona**

2 & 3 July 2013

CRITT (Centre for Research and Innovation in Translation and Translation Technology)
Copenhagen Business School

Department of Foreign Languages and Translation Studies
University of Eastern Finland

Department of Literature, Area Studies and European Languages
University of Oslo

Escuela Superior de Lenguas Extranjeras
Universidad del Aconcagua

GENTT (Géneros Textuales para la Traducción)
Universitat Jaume I

Institute of Translation and Interpreting
Zurich University of Applied Sciences

Institute for Interpretation and Translation Studies
Stockholm University

KeTra
Kent State University

LETRA (Laboratório Experimental de Tradução)
Universidade Federal de Minas Gerais

PACTE (Proceso de Adquisición de la Competencia Traductora y Evaluación)
Universitat Autònoma de Barcelona

PETRA (Pericia y Entorno de la Traducción)
Universidad de Las Palmas de Gran Canaria

School of Languages and Social Sciences
Aston University

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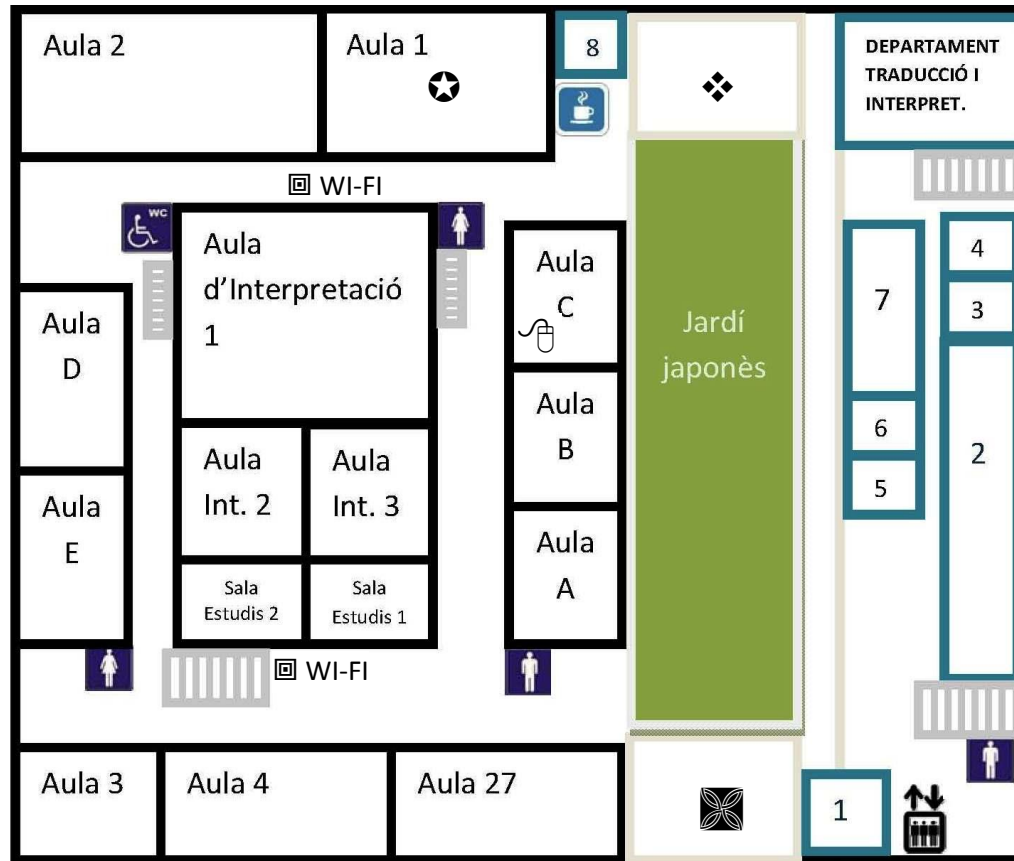
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GROUND FLOOR



-  Entrance
-  Sessions
-  Coffee Breaks
-  Computer Lab C
-  Wi-Fi Zone

Programme

**SEMINAR ON EMPIRICAL AND
EXPERIMENTAL RESEARCH IN
TRANSLATION**



TRANSLATION & RESEARCH
EMPIRICISM & COGNITION

Programme

Tuesday 2 July 2013

☞ **Registration** (Entrance hall) **and Opening** (Room 1) 9:30 ☞

☞ Retrospective view of Empirical and Experimental Research in Translation ☞

☞ **PowerPoint presentations and Poster** (Computer Lab C) 10:00-11:00 ☞

1. Aston U.: "Investigating translators' individual differences: a personal journey"
2. CRITT: "Research in CBS CRITT"
3. GENTT: "Analysing specialised genres for translation: the Gentt Project (2000-2013)"
4. KeTra: "Cognitive aspects of translation and post-editing: empirical investigations"
5. LETRA: "A retrospective view of empirical-experimental research at LETRA"
6. PACTE: "A retrospective view of PACTE's research into translation competence and its acquisition"
7. PETRA: "Ten years of PETRA"
8. Stockholm U.: "Two decades of Swedish empirical process-oriented research on translation and interpreting"
9. U. Aconcagua.: "In search of an effective method to observe students' translation process: Standing on the shoulders of giants"
10. U. Eastern Finland: "Mapping uncharted territory - a roundtrip: methodological and theoretical perspectives"
11. U. Oslo: "Development of the research carried out by the Oslo team"
12. ZHAW: "Capturing Translation Processes and Beyond"

☞ **Coffee Break** ☞

☞ **Roundtable: "Retrospective view of Empirical and Experimental Research in Translation"** (Room 1) 11:30-13:00 ☞

Moderators: Birgitta Englund Dimitrova, Riitta Jääskeläinen, Fábio Alves

☞ **TREC website presentation** (Room 1) 13:00 ☞

Patricia Rodríguez-Inés

☞ **Lunch (Buffet in Room Jordi Arbonès)** 13:30-14:30 ☞

☞ Presentations by Master students & PhD candidates ☞ (Room 1)

☞ **1st session.** Chaired by Allison Beeby 14:30-16:30 ☞

- Aquino, M.: "A relevance-theoretic study of processing effort in post-editing tasks: an analysis of German modal particles" (LETRA, UFMG)
- Fonseca, N.: "Investigating effort in monolingual post-editing: temporal, technical and cognitive aspects of effortful processing during task execution" (LETRA, UFMG)
- Koglin, A.: "Processing effort and cognitive effects trade-off in metaphor post-editing" (LETRA, UFMG)
- Szpak, K.: "Identifying Instances of Processing Effort in Translation: a key-logging and an eye-tracking study" (LETRA, UFMG)

☞ **Coffee Break** ☞

☞ **2nd session.** Chaired by Maureen Maureen Ehrensberger-Dow 17:00 – 18:30 ☞

- Mellinger, C.: "Effects of Translation Memory on Cognitive Effort: Preliminary Findings" (KenTra, Kent University)
- Sannholm, R.: "From Text Types to Automaticity in the Translation Process: Report on an MA thesis and an outline of a planned PhD project" (Stockholm University)
- Kumpulainen, M.: "'Pause' in translation process research" (U. of Eastern Finland)

Programme

Wednesday 3 July 2013

☞ Presentations by Master students & PhD candidates ☜

(Room 1)

- ☞ **3rd Session.** Chaired by Ricardo Muñoz 09:30- 11:00 ☜
- Borg, C.: "Investigating the process and product of literary translation from French into Maltese: a focus on the work of one Maltese translator" (Aston University)
 - Taffarel, M.: "The use of questionnaires for the analysis of the translation process: the translation of linguistic variation from Italian into other languages" (PACTE, UAB)
 - Muñoz, A.: "The medical translator's profile: analysis of professional competences and implications for university education" (GENTT, UJI)
-

☞ Coffee Break ☜

- ☞ **4th session.** Chaired by Séverine Hubscher-Davidson 11:30-13:00 ☜
- Olalla, C.: "Cultural competence in translation and its acquisition: research in culture and translation competence acquisition from an experimental point of view" (PACTE, UAB)
 - Amigo, J.: "Fitting culture into Translation Process Research" (PETRA, ULPGC)
 - Hunziker, A.: "Research ethics in empirical and experimental translation research: considerations from a PhD study" (ZHAW)
-

☞ Lunch (Buffet in Room Jordi Arbonès) 13:00-14:00 ☜

- ☞ **5th session.** Chaired by Mónica Giozza 14:00-15:30 ☜
- Castillo, L.M.: "Acceptability and the acquisition of translation competence: preliminary results" (PACTE, UAB)
 - Massana, G.: "An experimental research on translation competence acquisition: translating from Portuguese into Spanish" (PACTE, UAB)
 - Hunziker, A.; Meyer, A.: "The importance of cognitive and physical ergonomics at translators' workplaces" (ZHAW)
-

☞ Coffee Break ☜

- ☞ **Final roundtable discussion** 16:00-17:30 ☜
- Moderators: Amparo Hurtado, Arnt Jakobsen and two students
-

❧ ABSTRACTS ❧



Abstracts

- Retrospective view of Empirical and Experimental Research in Translation.....7
- Master Students and PhD Candidates.....20





**∞ Retrospective view of Empirical
and Experimental Research in
Translation ∞**

1. Aston University
School of Languages and Social Sciences

Hubscher-Davidson, Séverine

Title

Investigating translators' individual differences: a personal journey

Abstract

Once upon a time... My journey began with the following question: why do twenty students with apparently similar profiles inevitably translate the same source text in twenty different ways? Providing an answer to this question motivated me to investigate empirically the performance of student translators, and led me to start a PhD aiming to investigate the influence of personality traits on translation performance. In the presentation, I will demonstrate how this doctoral work inspired me to continue the journey (into the wilderness?) and to explore translators' individual differences (IDs). A detour in the land of Ethnography and a short stay in the dark woods of the nonconscious mind, seeking out elusive intuitive processes, enabled me to explore how different models and frameworks could be applied to the study of IDs in translation and to trial new and different ways to approach the study of the translation process. The presentation will conclude with a discussion of the most recent stages of my journey, including a study of professional translators' emotional intelligence, and how I expect it to evolve over the coming years. To a new land beyond perhaps...?

2. CRITT Copenhagen Business School

Jakobsen, Arnt
Bonk, Ragnar
Carl, Michael
Dragsted, Barbara
García Martínez, Mercedes
Hvelplund, Kristian Tangsgaard (University of Copenhagen)
Mesa-Lao, Bartolomé
Rizzollo, Fulvio
Winther Balling, Laura

☞ Title ☞

Research in CBS CRITT

☞ Abstract

Research in the CBS CRITT environment has evolved in three main phases so far that can be described on the basis of the dominant method used as (1) KEY (2) EYE and KEY and (3) MT, ASR, EYE and KEY.

(1) The keylog program Translog was developed in 1995 to make it possible to triangulate hard translation process data (timed keystrokes) against softer verbal data from interviews and think-aloud sessions. The Translog software was continually developed in the context of the TRAP project 1996-2000, whose members included Gyde Hansen, Maria Pilár Lorenzo, Astrid Jensen and Arnt Lykke Jakobsen, with Lasse Schou as the ever-ready programmer. Methodologically, the TRAP project was based in large measure on either a combination of think-aloud and KEY data or, increasingly, on the combination of KEY and cued retrospection (CR) data elicited by means of Translog's replay function. Gyde Hansen's *Störquellen in Übersetzungsprozessen* (2005) study illustrates work using this method. Two PhD theses were produced in this paradigm, Astrid Jensen's on effects of time pressure on translation from 2000 and Barbara Dragsted's on segmentation in translation from 2004.

(2) Inspired by Schilperoord (1996), keystroke intervals were interpreted as evidence of cognitive processing, but it was only possible to speculate on how much processing was spent on ST comprehension, TT formulation, and other features of the complex of translational processing. The next major methodological development was the addition of gaze data from an eyetracker. This idea was discussed in the Expertise group started by Antin Fougner Rydning and eventually led to the purchase of the centre's first eyetracker for money from the FP6 Eye-to-IT project (2006-2009). The expectation was that by adding EYE data to KEY (and possibly CR) data it would become possible to get a clearer and more distinct picture in particular of comprehension, production, and coordination processes. The anthology *Looking at Eyes* (2008), Kristian T. Hvelplund's PhD thesis on the allocation of cognitive resources in translation (2011) and Annette C. Sjørup's on cognitive effort in metaphor translation (2013) are representative of work in this phase.

(3) The most recent development is due to the arrival in CRITT of researchers from the former CBS department of computational linguistics, including people with expertise in machine translation (MT) and in automatic speech recognition (ASR). This has resulted in the recent creation of a new research group called The Bridge, see <http://bridge.cbs.dk>, of which much more at UAB.

3. GENTT

Universitat Jaume I

García Izquierdo, Isabel
 Borja Albi, Anabel
 Ezpeleta Piorno, Pilar
 Muñoz Miquel, Ana María
 del Pozo Triviño, Maribel

Title

Analysing specialised genres for translation: the GENTT project (2000-2013)

Abstract

The GENTT (Textual Genres for Translation) research group, based at the Universitat Jaume I in Spain, has been working on the application of the concept of text genre as a conceptual and methodological tool to analyse, from a multilingual perspective, different fields of specialised translation and communication. Since the beginning of the GENTT project in 2000, the research has gradually shaped a definition of the concept of text genre by taking propositions from systemic functional linguistics, genre theory applied to translation, and sociology of professions (García Izquierdo, 2009). Taking as the starting point the three perspectives (formal, communicative and cognitive) that form the definition of genre, GENTT has focused on the study of the formal and communicative aspects, although some research on the cognitive perspective of genre has also been carried out, particularly regarding its relation with the acquisition of translation competence (Montalt, Ezpeleta and García Izquierdo, 2008; Borja, García Izquierdo and Montalt, 2009). Formal aspects have been researched by describing, systematising and analysing specialised genres from the medical, legal and technical fields (García Izquierdo, 2009; Ezpeleta Piorno, 2012), and communicative aspects have been approached by incorporating the needs and insights of the professionals and experts who work with the genres under study (García Izquierdo, 2009; García-Izquierdo y Conde, 2012). In terms of research methodology, both qualitative and quantitative methods have been used. Regarding quantitative methods, corpus analysis and exploitation techniques as well as computer linguistics applications have been used. These methods have been combined with qualitative ones, that is, focus groups, interviews and surveys, in order to discover the most significant socio-professional aspects of the communicative situations under study. Current research of the GENTT group has incorporated the action research (Lewin, 1946), by which active participation of researchers in the situation under study is required. The main achievement of the group has been the development of an electronic document management system, the Corpus GENTT 3.0 (known as Corpus GENTT and Corpus GENTT 2.0 in former versions), with which textual and contextual information of more than 450 genres and subgenres in five different languages can be retrieved (García Izquierdo, 2011). Other recent contributions that derive from the Corpus are the JudGentt and MedGentt platforms, which are documentation management systems for legal and medical translators, respectively. This paper offers a panoramic view of the GENTT project to date, describes the main contributions of the group, and outlines the key aspects of their future work, focused on testing JudGentt and MedGentt platforms with real users, and on carrying out action research within the medical field.

4. KeTra Kent State University

Angelone, Erik
Lacruz, Isabel
Shreve, Gregory Monroe

Title

Cognitive aspects of translation and post-editing: empirical investigations

Abstract

KeTra is the result of synergies and collaborations between Greg Shreve, Erik Angelone, and Isabel Lacruz at the Institute for Applied Linguistics at Kent State University. Its origins can be traced to collaborations between Greg Shreve and researchers in experimental psychology in the 1990s. Its work began in earnest when Erik Angelone joined the Institute in 2007, followed by Isabel Lacruz in 2010.

Early research was based in observational studies aimed at developing an understanding of the role of expertise and meta-cognition in uncertainty management during translation, probing how translators engage in problem solving and seeking process-oriented strategies for enhancing translator training. Methodologies included self-report from translators, such as think aloud protocols, and behavioral observations through screen recordings.

Since 2010, there has been a surge of activity in experimental research. Efforts have been focused on:

- understanding the nature and locus of mental effort expended by translators during written translation, sight translation, and post-editing; and
- identifying mental representations of language that are unique to translators.

Eye-tracking measures were used to investigate how translators responded to different levels of syntactic complexity during sight translation. The process of producing written translations of the same materials was analyzed using a key-logger. Syntactic complexity was more disruptive for sight translation than for written translation.

Understanding the effort involved in post-editing machine translations is important not only in developing effective training programs for effective post-editing, but also in helping machine translation program developers to improve their products. Key-logging experiments uncovered an apparent relationship between cognitive effort and pause patterns during post-editing. An important finding was that short pauses are a key indicator of cognitive effort.

Most bilinguals are not trained as translators. So, just as monolinguals and bilinguals have different mental representations for language, it can be expected that translators will show unique traits in their mental representation of the languages they work with. Very recent reaction time experiments provide evidence that this is indeed the case: translators' lexical decision time patterns to cognates and false friends were different from those of bilinguals, indicating that these types of words have different underlying representations for translators.

🔗 **5. LETRA**
Universidade Federal de Minas Gerais

Alves, Fábio
Pagano, Adriana
Vila Real Gonçalves, José Luiz

🔗 Title 🔗

A retrospective view of empirical-experimental research at LETRA

🔗 **Abstract**

This presentation offers a retrospective view of empirical-experimental research in translation carried out at the Laboratory of Experimentation in Translation (LETRA) at Federal University of Minas Gerais (UFMG) over the past twelve years. Beginning with think-aloud protocols (TAPs), research evolved to incorporate key-logging and eye-tracking data in LETRA's experimental designs in recent years under the paradigm of data triangulation. The retrospective view highlights LETRA's efforts to foster more rigorous procedures and the replication of studies, aiming at producing more robust evidence to consubstantiate claims in translation process research.

6. PACTE

Universitat Autònoma de Barcelona

Hurtado Albir, Amparo

Beeby, Allison

Castillo, Luis

Fox, Olivia

Galán-Mañas, Anabel

Grauwinkel, Gabriele

Kuznik, Anna (University of Wrocław)

Massana, Gisela

Neunzig, Wilhelm

Olalla Soler, Christian

Rodríguez-Inés, Patricia

Romero, Lupe

Taffarel, Margherita

Wimmer, Stefanie

Title

A retrospective view of PACTE's research into translation competence and its acquisition

Abstract

In October 1997 the PACTE research group was founded to carry out experimental research into the acquisition of translation competence. Our research was structured in two main stages: the first stage an empirical study of translation competence, collecting and comparing data on the knowledge and behaviour of professional translators and foreign language teachers with no experience in translation; the second stage an empirical study of the acquisition of translation competence by translator trainees and recent graduates.

Our presentation will show the basic steps taken at each stage (models proposed, exploratory and pilot studies, experiments), as well as the instruments used and the main results obtained. We will also present our plans for the future of our research.

7. PETRA

Universidad de Las Palmas de Gran Canaria

Muñoz Martín, Ricardo
 Amigo Extremera, José Jorge
 Bolaños Medina, Alicia
 Conde Ruano, J. Tomás (Euskal Herriko Unibertsitateko)
 Klimant, Petra (University of Cologne)
 Martín de León, Celia
 Presas, Marisa (Universitat Autònoma de Barcelona)
 Shao-hui, Liang (Universitat Autònoma de Barcelona)

Title

Ten years of PETRA

Abstract

Pericia y Entorno de la TRAducción (Expertise & Environment in Translation) started in the year 2000. PETRA is not exactly a team, but a loose group of researchers from different universities who agreed on a general plan comprising three consecutive phases to address what we identified as basic research needs: (1) to update basic assumptions sustaining the empirical research of the mental processes involved in translating and interpreting, (2) to study the most suitable research goals and methods to validate a new theoretical framework; and (3) to describe translation and interpreting processes accordingly.

It has taken us ten years to somewhat reach our first goal. Several minor empirical projects plus eight PhD dissertations channelled theoretical discussions and reflections that have crystallized in a minimal, tentative framework that we have unimagatively dubbed Cognitive Translatology. An inductive paradigm mainly inspired by embodied embedded cognition that also incorporates extended and distributed cognition views on the behaviours displayed by translators and interpreters. Of course there has been some overlap between our goals and in each project we learned quite a bit regarding research methods, that we have applied in later projects.

We now feel we are ready to start the second phase to focus more on research ways and methods. We now have four PhD projects in the works: Amigo is focusing on the operationalization of culture in empirical research. Klimant is testing the construct of mental load as one of the possible Rosetta stones to contrast different approaches to the translation process. Castro is working on reading behaviours and comprehension in translation, to check their links with related constructs in neighbouring disciplines. Liang has started to dive into the implicit beliefs of novice trainees, as a way to test the dimensions of knowledge and self-concept in our situated construct of translation expertise.

8. Stockholm University
Institute for Interpretation and Translation Studies

Englund Dimitrova, Birgitta

Title

Two decades of Swedish empirical process-oriented research on translation and interpreting

Abstract

In 1993, Birgitta Englund Dimitrova started the project "Semantic change in translation – a cognitive perspective", funded by the Swedish Research Council for the Humanities and Social Sciences. It was an ambitious project, setting several aims: to propose a typology of semantic change in translation (and interpreting), and to study, on data elicited from the translation process, how semantic change of various kinds comes about, or not, in the process. With these data, the purpose was to corroborate a number of hypotheses regarding the role of the translator's semantic representation in the process. In retrospect, this project and its research environment turned out to be the rallying-point for a number of subsequent translation research projects with a process-orientation, mainly at the university of Stockholm, but also to some extent at the university of Uppsala. These projects have analyzed data from a number of language combinations: English-Swedish, German-Swedish, French-Swedish, Russian-Swedish, and French-German. Research has been carried out both by senior researchers, PhD students and MA students.

There are a number of characteristics of the Swedish research with a process-orientation:

- it comprises to a large extent *individual projects*: they have been designed and carried out most often by individual researchers, according to their own interests, but with inspiration and influence from other studies, Swedish and international;
- the majority of the projects have a *combined process and product perspective*, with the analysis of textual aspects being a prominent and integral part of the process study;
- the nature of *experience and expertise in the translation and interpreting process* is targeted in several projects, both in cross-sectional and longitudinal research designs;
- *revision* (both self-revision and other-revision) is an important focus for some projects;
- a predominant *process methodology* is think-aloud-protocols, and some studies combine this with keystroke logging;
- some projects are focused on or include the cognitive processes of *interpreting*.

The projects have resulted in a number of publications: 3 PhD dissertations, published as monographs by the respective university, 1 soon-to-be submitted PhD dissertation by articles, and 2 MA theses. Furthermore, Benjamins Translation Library has published 1 monograph by senior researcher, 1 conference proceedings volume and 1 edited volume. Apart from these, there is a substantial number of articles in different publications.

9. Universidad del Aconcagua
Escuela Superior de Lenguas Extranjeras

Giozza, Mónica
Gatti, María del Mar

Title

In search of an effective method to observe students' translation process: Standing on the shoulders of giants

Abstract

Doing process-oriented research implies getting involved in a large and complex decision process due to the ample variety of methodological aspects. In our case, some decisions remained permanent such as population and directionality solely based on simple, pragmatic aspects such as ease of access; others involved possible transference of research results into translation teaching; however, the most critical ones were related to data collection. Which tool to use in order to be able to observe the process as accurately as possible? Triangulation proved to be the right answer. It helped us comply with ecological validity while keeping, at the same time, accuracy and reliability parameters. Support from software for key logging and screen recording combined with verbal recalls and post-task questionnaires proved to be highly effective. They provided the best of the quantitative world as well as the qualitative, thus leading us directly into the student's process (descriptive phase) and the reasons for their choices (explanatory phase). Our research process was built upon other larger and more evolved processes coming from other researchers' works. Paraphrasing Sir Isaac Newton's words, "if we want to see further than anyone else, it is necessary that we stand on the shoulders of giants".

🔗 **10. University of Eastern Finland**
Department of Foreign Languages and Translation Studies

Jääskeläinen, Riitta
Immonen, Sini
Kumpulainen, Minna
Mäkisalo, Jukka

🔗 Title 🔗

Mapping uncharted territory - a roundtrip: methodological and theoretical perspectives

🔗 **Abstract**

In the 1980s, the former Savonlinna School of Translation Studies was among the pioneers in translation process research, thanks to the innovative spirit of Professor (emerita) Sonja Tirkkonen-Condit. This paper gives a retrospective overview of how process research landed in Savonlinna, how it progressed, and where it is now. Our history of translation process research could be characterised by two main trends, one focusing on methodological issues and the other on the empirical testing of theoretical models and hypotheses (e.g. the Monitor-model; literal translation hypothesis). In addition, attempts to operationalize seemingly self-evident concepts, such as 'translation strategy' or 'professional translation,' have resulted in conceptual analyses to determine what we really mean by them. This overview will briefly describe these signposts on our journey through the uncharted territory of the translator's mind as well as outline some future directions.

11. University of Oslo

Department of Literature, Area Studies and European Languages

Rydning Fougner, Antin

Behrens, Bergljot

Lachaud, Christian Michel

Title

Development of the research carried out by the Oslo team

Abstract

Interest in translation process research began with Think-aloud-protocols (TAPs), which enabled fascinating insights in professional translators' problem-solving activities. Coupled with Translog keystroke logging, it laid the foundation for the EXPERTRANS-network, where the Oslo team started investigating comprehension and reformulation problems in translation in the language pair French - Norwegian. The fruitful cooperation with members of the EXPERTRANS-network led to the EU-financed EYE-to-IT project, where existing technologies (Keystroke logging, Eye-tracking, EEG measures) were refined, integrated pair-wise and triangulated in experimental studies. The Oslo team carried out a series of experiments related to two of the project's main goals: (i) study cognitive mechanisms in translation and (ii) investigate how translators can be prompted to improve their performance as regards speed and quality. The Oslo team's main focus lately has been on creativity in translation and the particular role that conceptual metaphors and metonymies play in the processing of meaning in translation. Today the research is carried out on a more ad hoc basis with low-scale funding from the Department with the centre of attention on the following topics: (i) the reasons behind conceptual clarity, (ii) the challenges of translating figurative language, (iii) the problems of recategorizing information.

12. Zurich University of Applied Sciences
Institute of Translation and Interpreting

Ehrensberger-Dow, Maureen
Massey, Gary

Title

Capturing Translation Processes and Beyond

Abstract

A decade ago, a colleague from our sister institute published a seminar article about the writing processes of journalists (Perrin 2003). Various similarities between journalists' and professional translators' work (e.g. reliance on source texts, necessity for research, sensitivity to target audience) prompted us to explore whether the multi-method approach used to study journalists could be employed with translators. By the end of 2006, a large-scale study at our institute had been launched to record and analyze the translation processes of students at various stages of their career. External funding from the Swiss Science Foundation for the Capturing Translation Processes project, which ran from the beginning of 2009 until 2012, allowed us to broaden our scope to include professional translators at their workplace. Many of the insights gained from that research have been incorporated into diagnostics, teaching, and curriculum design. In the course of the workplace study, however, we realized that a thorough understanding of the situated activity of translation requires input from disciplines outside applied linguistics and translation studies. As a result, our most recent research combines perspectives from translation studies, occupational health, usability testing, and language technology.



**∞ Master Students
PhD Candidates ∞**



☞ **Amigo Extremera, José Jorge**

PETRA

Universidad de Las Palmas de Gran Canaria

☞ Title ☞

Fitting CULTURE into Translation Process Research

☞ **Abstract**

My PhD research deals with the potential operationalizations of culture within cognitive, empirical approaches to translation research. My ultimate goal is to suggest an understanding of culture to be operationalized for empirical research within the framework of cognitive translology (Muñoz 2007a & 2007b, 2010a & 2010b). The point of departure is the rejection of culture as something static (Martín de León 2003, 2005, 2008). This presentation aims to provide an outline on how culture is conceived of and operationalized in some instances of Translation Process Research (TPR) and also in some second-generation cognitive paradigms (social and situated cognition).

Traditional paradigms in TS usually consider culture as an external factor to the translation activity; a more or less closed set of habits, beliefs and practices that may be studied as (a) a series of partial perspectives (e.g., idioculture, diaculture, paraculture in Göhring 1978 and Reiss & Vermeer [1984] 1991:37) and (b) the result of cross-cultural comparisons (e.g., rich points in Agar 1994; culturemes in Nord 1997:34). These approaches seem quite useful but often lack empirical support.

In TPR, culture is often implicitly equated with background knowledge, i.e., with some subcompetences integrating notions such as bicultural knowledge, encyclopedic knowledge, subject knowledge (e.g., PACTE 2003:58, 2005:610, 2007:330, 2011:33), pragmatic knowledge and domain competence (e.g., Göpferich 2009:20). Some contributions in TPR seem to portray culture as formal academic training + professional experience (e.g., Jakobsen et al 2007:229, Sharmin et al 2008:33). Jensen (2008:167) associates it to language proficiency too, and Dragsted (2005:58) links professional background + domain-relevant knowledge with perceptions of difficulty in translation. These approaches may not necessarily fit in translological paradigms based on social and situated cognition.

Social cognition envisions culture as a frame for human adaptation (Tomasello 1999a:509), because only human beings engage in cultural learning (Tomasello 1999b:6). Only our traditions accumulate modifications over historical time, and they entail an acquisition process. In such acquisition process, selecting bits of information and also the schematic structures for experiencing culture play a fundamental role (Dimaggio 1997:263). I will explore how some methodological implications of researching culturally based cognitive differences in social cognition (Vogelely & Roepstorff 2009) might be applied to TPR.

In situated cognition, current research presents priming techniques as a way to empirically study how culture (as a frame) and cultural differences influence on the way we behave (Oyserman & Lee 2008a, 2008b, 2010 and Oyserman & Sorensen 2009). This leads to operationalize culture in terms of individualism and collectivism.

✉ **Aquino, Marceli**

LETRA

Universidade Federal de Minas Gerais

✉ Title ✉

**A relevance-theoretic study of processing effort in post-editing tasks:
an analysis of German modal particles**

✉ **Abstract**

This paper aims at analysing post-editing processes of machine translation output in the language pair German/Portuguese with a focus on processing effort related to German modal particles (henceforth GMP). These are linguistic elements that pose difficulties for translation and post-editing because, besides being directly dependent on the context in which they operate and have an expansive meaning, they have no direct counterpart in Portuguese (SOUZA, 2008, p. 79). First, we first analysed a corpus of written newspaper articles taken from the Deutsche Welle website in order to ascertain the occurrence of GMPs within specific contexts. Next, we carried out an exploratory study with two subjects to assess how GMPs would be post-edited. Data was collected using the software Translog and a Tobii T60 eye tracker and analysed with a focus on eye fixations in four selected areas of interest containing GMPs. The results show that eye fixations related to GMPs concentrate on the source text and point to a low number of interventions with only minor modifications appearing in the post-edited output. The results offer interesting insights into how GMPs are post-edited in Portuguese and indicate the feasibility of a larger scale study to probe further into this.

🌀 **Borg, Claudine**
Aston University

🌀 Title 🌀

Investigating the process and product of literary translation from French into Maltese: a focus on the work of one Maltese translator

🌀 **Abstract**

This research project investigates in-depth the process and product of an experienced Maltese translator of French literary texts. The investigation is particularly concerned with the choices and decisions the translator makes during the translation process, the factors influencing them and their impact on the final translation. I am interested to discover how the translator under study moulds his work, what influences his choices and what lies beneath his decisions. As Boase-Beier links translator's choices with style and asserts that style is the result of choice (2006: 1), this research also attempts to establish whether a characteristic style can be identified in the work of this translator.

Particular attention is given to self-revision and the post-drafting phase of the translation process: the translator will be observed while he revises the draft of a whole literary text. The study adopts a multi-method approach by collecting data through think-aloud, translator observation, interviews, analysis of drafts and ST-TT comparison drawing on corpus-based techniques. The data elicited will be triangulated and analysed qualitatively and quantitatively. This project puts the translator in the limelight, centring upon his work and the process leading to it while at the same time exploring a scantily researched language pair namely French to Maltese. It aims to provide further insights into the translation process and translatorial decisions.

✎ **Castillo, Luis Miguel**

PACTE

Universitat Autònoma de Barcelona

✎ Title ✎

Translation acceptability and the acquisition of translation competence: preliminary results

✎ **Abstract**

This presentation will deal with some of the results of a PhD thesis research into the acceptability of translations (translation quality) and its relationship with the process of the acquisition of translation competence (ATC). The results were obtained in PACTE's experiment on the acquisition of translation competence, consisting in an empirical study of the acquisition of translation competence by translator trainees from the B.A in Translation taught at the Facultat de Traducció i d'Interpretació, UAB (years: 1st, 2nd, 3rd and 4th) and recent graduates.

This PhD thesis research attempts to describe the evolution of translation quality throughout the process of the acquisition of translation competence. The language combination chosen for our sample is English-Spanish. The main sources of data from where we base our observations are the translations of participants and a specific questionnaire about quality, which only those participants with the previously mentioned language combination were asked to answer during the experiment.

Translations were assessed using the Rich Points procedure, and our specific questionnaire about translation quality, which attempts to elicit the perception of quality by participants, is also based on the Rich Points.

☞ **Fonseca, Norma**

LETRA

Universidade Federal de Minas Gerais

☞ Title ☞

Investigating effort in monolingual post-editing: temporal, technical and cognitive aspects of effortful processing during task execution

☞ **Abstract**

This paper draws on Krings (2001) to investigate aspects of temporal and technical effort by comparing monolingual post-editing data with bilingual post-editing and human translation data in the language pairs English-Portuguese and French-Portuguese. Building on Alves and Gonçalves (2013), we also investigate cognitive effort during monolingual post-editing processes in the same language pairs. In order to do that, we have carried out an exploratory study with six subjects in each language pair. Data was collected using key logging, screen recordings, and guided written protocols. The analysis focused on task execution time, on the number of mouse and keyboard movements in the three different tasks, and on the number and types of encodings found in micro/macro post-editing units in the monolingual post-editing task. Preliminary results indicate that temporal effort is greater in bilingual post-editing in the English-Portuguese language pair, and that technical effort is greater in monolingual post-editing in the same language pair. Regarding cognitive effort, results suggest that processing effort is stronger in instances of conceptual encodings in both language pairs when subjects had to solve selected post-editing problems.

- ☞ **Hunziker Heeb, Andrea**
Institute of Translation and Interpreting
Zurich University of Applied Sciences

☞ Title ☞

Research ethics in empirical and experimental translation research: considerations from a PhD study

☞ **Abstract**

While preparing my PhD study on professional translation into the L2, I have had the opportunity to draw on a range of publications and recommendations on experimental rigor and good practice in empirical and experimental translation research. However, there seems to be a lack of publications on research ethics in the field. Although in some countries, researchers have to submit every study where people are involved to an ethics committee, ethical research concerns or solutions only seldom find their way into a paper. In my opinion, it is important that translation researchers deliberately address field-specific ethical issues and implications of what they are doing. In this presentation I, will focus on ethical issues that may arise with professional translators as research participants. As a framework, I will use a general academic self-evaluation checklist and a code of good practice in research. I will illustrate the points mentioned in those two documents with examples from my study. By doing so, I hope to provide some input for further discussion in the plenum.

☞ **Hunziker Heeb, Andrea & Meyer, Annina**

Institute of Translation and Interpreting
Zurich University of Applied Sciences

☞ Title ☞

The importance of cognitive and physical ergonomics at translators' workplaces

☞ **Abstract**

Professional translators in many European companies and institutions work under very different conditions from what students in the relatively protected setting of a university translation class might expect. During the course of a previous research project at our institute, translators talked about their perceptions of those conditions in ways that we recognized as ergonomic issues associated with software settings, equipment, and/or physical conditions. Our present project builds on previous research in order to identify potential ergonomic problems inherent in the design of user interfaces, including those of standardized translation aids such as readily available online dictionaries and translator workbenches. We hypothesize that these can impede the efficiency of translation by slowing down decision-making and other cognitive processes during translation. Since environmental factors related to the workplace and its equipment can influence the health of translators and lead to mental overload, which in turn can affect the efficiency of the translation process, a consideration of physical ergonomics is also an integral part of this project. The focus of this presentation will be the study design, methodology, and the hypotheses derived in the first phase of the project from the analysis of the large corpus of professionals' translation processes obtained in the precursor study. The findings of the second phase of the study are expected to have implications for theoretical models of situated activity and extended cognition, workplace practice, education, and further developments at the human-computer interface.

☞ **Koglin, Arlene**

LETRA

Universidade Federal de Minas Gerais

☞ Title ☞

Processing effort and cognitive effects trade-off in metaphor post-editing

☞ **Abstract**

The central claim of Relevance Theory (Sperber & Wilson 1986/1995) is that expectations of relevance raised by an input guide the hearer towards the speaker's intended meaning. At the core of the theory, there is the relevance-theoretic definition of a trade-off between cognitive benefits and processing cost. Despite its intuitive plausibility, Gibbs & Tendahl (2006: 387) mention that there is no empirical evidence supporting the "more cognitive effort = more cognitive effects" hypothesis on metaphor interpretation. This study examines the possible relations between processing effort and cognitive effects in metaphor post-editing. We hypothesize that processing effort will correlate with cognitive effects in metaphor post-editing. In order to test this hypothesis, a pilot study was carried out at the Laboratory for Experimentation in Translation (LETRA) under the experimental paradigm of data triangulation in translation process research (Alves 2003). Four participants were asked to post-edit a Google machine translation output in Task 1 and to post-edit a Systran machine translation output in Task 2. The two tasks were performed using a 224-word newspaper text about the Tea Party Movement and collected by means of eye tracking, key logging and retrospective protocols. The analysis focuses on eye-tracking data (total fixation duration and fixation count) to measure processing effort and on a five-point Likert scale to measure cognitive effects. A Pearson's correlation test was performed to measure the strength of the association between the two variables. The results suggest a negative association between processing effort and cognitive effects in the second post-editing task. It seems that the greater the processing effort, the less cognitive effects were yielded. No significance was found in Task 1.

☞ **Kumpulainen, Minna**
University of Eastern Finland

☞ Title ☞

'Pause' in translation process research

☞ **Abstract**

A pause is a frequent feature in any translation process. Writing process research has yielded results according to which pauses may be indicators of cognitive processes, especially planning, and the length of pauses often correlates with the linguistic units that are being planned in these pauses (Spellman Miller 2006: 15 ff, in Göpferich and Jääskeläinen 2009: 173). Thus pauses are often taken to signal cognitive processing in translation production as well, the location of pauses indicating where planning, problem-solving and/or evaluation occur, thus setting the boundaries of segments (or translation units) (e.g. Englund-Dimitrova 2005: 29, Asadi and Seguinot 2005: 525; Dragsted and Hansen 2008).

As a marker of cognitive processing, a pause is often regarded as an indicator of a translation problem in the translation process research. However, a pause in one research setting may be different from a pause in another setting, depending on the research method and purpose of the study. The same applies to what is considered a 'significant' pause length. Thus, in some studies, a pause is defined as a minimum of 1 second break in text production while in others pausing refers to breaks of 3 seconds or more in think-aloud data. Yet other studies define a significant pause in text production being 5 seconds. When the newest technology, eye-tracking, is used as a method of data collection, a pause refers to instances where no eye-gaze data is available.

This presentation presents an overview of the use of pauses in translation process research and discusses the issue for the benefit of the author's own project, in which a pause refers to a break of the minimum of 3 seconds in the video recorded text production data and is regarded as one indicator of a boundary between process segments.

☞ **Massana, Gisela**

PACTE

Universitat Autònoma de Barcelona

☞ Title ☞

An experimental research on the acquisition of translation competence: translating from Portuguese into Spanish

☞ **Abstract**

The aim of the presentation is to present the design of an empirical-experimental research on the acquisition of translation competence from Portuguese into Spanish. The empirical-experimental research is longitudinal and it studies the acquisition in written translation. The research is complementary to the research carried out by PACTE Group (Process of Acquisition of Translation Competence and Evaluation) at the Universitat Autònoma de Barcelona.

The subjects of the experiment are trainee translators from Universitat Autònoma de Barcelona and Universidad de Granada studying Portuguese as a second foreign language. It observes second-year students, third-year students and fourth-year students. The experiment was developed from May to December 2012. In order to guarantee the internal and external validity of the experiment, we carried out a pilot test and adapted some instruments that had previously been validated by PACTE Group.

The paper presents the objectives of our empirical-experimental research, the hypothesis and the methodology issues arising out the research design.

✉ **Mellinger, Christ**
KeTra
Kent State University

✉ Title ✉

Effects of Translation Memory on Cognitive Effort: Preliminary Findings

✉ **Abstract**

Drawing on empirical research methods and design from cognitive psychology and translation studies, this research project aims to better understand the effect that translation memory has on the cognitive effort of a translator. Translation memory (TM) is increasingly more common in the daily work of translators, and it is hypothesized that TM systems affect how cognitive resources are allocated, as well as the overall cognitive load of the translator. The question arises as to how cognitive effort is distributed during the translation task, and if errors in proposed fuzzy matches have any bearing on the translation task. Preliminary findings will be presented of an empirical study that aims to investigate how the use of TMs and specific fuzzy match features affect the translation process in Spanish-to-English translation professionals with 4–7 years of experience. Results related to the overall cognitive effort will be discussed, as well as the pause contour of applied cognitive effort when using a translation memory to translate. These results have implications for translator training using CAT tools, as well as for CAT tool designers. This line of inquiry aims to further our understanding of the cognitive processes of translation, and more specifically, to shed light on the influence that the use of TM tools has on cognitive translation processes.

✉ **Muñoz Miquel, Ana**

GENTT

Universitat Jaume I

✉ Title ✉

The medical translator's profile: analysis of professional competences and implications for university education

✉ **Abstract**

Medical translation is an essential activity for the development of medical communication and knowledge (Montalt, 2007: 213). Due to its high market demand and its specific characteristics, both scholars and professional translators (Lee-Jahnke, 2001, Navarro 2002; Mayor, 2003; Montalt and González, 2007) highlight the need for highly qualified and specifically trained translators. In the field of Translation Studies, the notion of translation/translator competence has been widely used for designing and implementing university training programmes. This concept is also at the core of the new higher education framework in Europe, since all degrees should be designed according to competences, and these should be established on the basis of current and emerging professional profiles. In such a context, empirical studies on the profile and competences of translators are more necessary than ever.

In the medical translation field, there is a lack of studies focusing on the competences and/or the professional medical translator profile. Existing literature consists mainly of opinions based on intuition or personal experience. In view of this situation, this PhD thesis aims to obtain empirical data about the medical translator and the professional practice of medical translation so as to be used to inform the design of medical translation training programs. The overall objective is to determine the competences students should acquire by comparing information from the professional sphere (medical translators, who put into practice specific competences when carrying out their professional activity) and from the academic context (postgraduate training programs specialized in medical translation, which establish the main competences to be acquired by students).

This dissertation is divided in three parts. First, a theoretical review of the main contributions in medical translation, sociology of professions, and translation competence is presented. Second, an empirical study—in which a mixed research method is applied—is performed. This part consists of two studies. The first one focuses on the socio-professional context: professional medical translators are interviewed and surveyed. In the second study, the Spanish master's degrees in which medical translation is taught are identified, and the main competences to be acquired according to their curriculum are described. The third part of the thesis compares the information obtained in both empirical studies, establishes a profile of the professional medical translator, and proposes a model of competences to be acquired in a master's degree in medical translation. In this paper we present the main results obtained to date from the two empirical studies.

✉ **Olalla-Soler, Christian**

PACTE

Universitat Autònoma de Barcelona

✉ Title ✉

Cultural competence in translation and its acquisition: research in culture and translation competence acquisition from an experimental point of view

✉ **Abstract**

The aim of this presentation is to introduce the methodology used in a study into the cultural competence of the translator and its acquisition that will be carried out in our PhD thesis entitled “The cultural competence of the translator and its acquisition”.

Culture and cultural competence of the translator have been rarely studied from an experimental point of view in Translation Studies, or they have only been studied as a part of the translation competence. In our study, we part from the translation competence model proposed by PACTE (2003) but we focus on the cultural competence of the translator (included in the extralinguistic subcompetence), on how it is acquired and on how it relates to the other subcompetences.

Our sample will be composed by a minimum of 10 students of each of the four years of the Bachelor’s degree on Translation and Interpreting at the Universitat Autònoma de Barcelona. Their linguistic combination will be German as a second language and Spanish as mother tongue. We will also use a control group of ten professional translators.

To gather the data needed to contrast our hypotheses, we will use the following instruments: a) an initial questionnaire to select the sample, b) a text full of culture items to be translated, c) a questionnaire about translation knowledge, d) a questionnaire about the problems encountered in the translation and e) a questionnaire about cultural and intercultural perception. Questionnaires a, c and d have been already validated by PACTE and they will be adapted to our needs. We will gather data not only of the product, but also of the translation process. To do so we will use software to record the-screen activity.

Once introduced the details of the methodology used, we will move on to discuss what improvements could be made in the design and how the gathered data could be completed.

☞ **Sannholm, Raphael**
Stockholm University

☞ Title ☞

From Text Types to Automaticity in the Translation Process: Report on an MA thesis and an outline of a planned PhD project

☞ **Abstract**

The purpose of this presentation is twofold: Firstly, I am going to give a brief presentation of some of the results from my MA thesis research, which was carried out in 2010. Secondly, I am going to present an outline of a future PhD project on automaticity in the cognitive processes in translation.

The aim of my MA project was to investigate whether different text types give rise to different foci in the cognitive processes during translation within a fairly homogenous group of participants. Four final-year translation students with similar academic background, degree of experience and language combinations, were thus asked to translate one operative and one informative text from English into Swedish while verbalising their thoughts. The verbalisations were recorded and transcribed into think-aloud protocols (TAPs), which were classified and analysed using Jääskeläinen's (1999) model of marked and unmarked processing. The analysis showed that the participants focused on similar aspects regardless of the source text, which indicates that the text type did not have any significant effect on the translation process in the study at hand. The possible causes of this result will be reflected upon and discussed in the presentation.

My planned PhD project focuses on automaticity, which has been a core concept in process-oriented translation research since the 1980's, mainly because of the interest in the relation between experience and automated processing. Despite enlightening insights provided by previous research, there still seems to be room for investigation on the subject, especially when it comes to the development of automated processes among translators who have not yet acquired any significant work experience. Questions regarding which processes are automated, and the way in which this is mirrored in the target texts, could arguably be investigated in a longitudinal study where a number of data collection sessions are carried out, with the same participants. The results of such a study might generate new knowledge regarding the cognitive development of translators.

✉ **Szapak, Karina**

LETRA

Universidade Federal de Minas Gerais

✉ Title ✉

**Identifying Instances of Processing Effort in Translation:
a key-logging and an eye-tracking study**

✉ **Abstract**

Drawing on the seminal work of Just and Carpenter (1980) and on experimental studies in translation process research (Jakobsen and Jensen 2008, Pavlovic and Jensen 2009, Alves, Pagano and Silva 2009, Hvelplund 2011, Carl and Kay 2011, Carl and Dragsted 2012, among others), this study aims at discussing how fixation count and fixation duration can be used in the analyses of instances of processing effort in translation. According to Relevance Theory (Sperber & Wilson, 1986/1995), one of the ways to measure processing effort lies in the analysis of conceptually and procedurally encoded information. Assuming that instances related to procedural encodings will require more effortful processing not only in relation to time spent but also in terms of attention units, we hypothesize that processing effort devoted to a translation task will be stronger on areas of interest related to the target text. And once eye fixations tend to vary considerably among subjects, we propose a methodological approach that uses overlapped heat maps in selected areas of interest in conjunction with key-logged data to analyze potential translation problems. Thus, we hope to offer a methodological contribution for the use of eye-tracking data in translation process research.

✉ **Taffarel, Margherita**

PACTE

Universitat Autònoma de Barcelona

✉ Title ✉

The use of questionnaires for the analysis of the translation process: the translation of linguistic variation from Italian into other languages

✉ **Abstract**

Questionnaires are a useful tool for the analysis of the translation process, especially when translation involves complex problems such as the case of linguistic variation.

The purpose of my PhD thesis is to describe the problems caused to translators by the presence of linguistic varieties (geographic and social dialects) in the novel *Il cane di terracotta* by the Sicilian author Andrea Camilleri. Both the translation process and its product are analysed in order to identify which competences are required of translators when faced with these problems. The analysis of the translation process is based on an in-depth interview directed to Camilleri's translators into different languages. The questionnaire is divided into three main parts.



Part I includes six questions which deal with general problems caused by the presence of dialects in a literary text. Its main objective is to explore the translator's implicit knowledge of the principles governing translation (PACTE: 2011). The translator is asked to give his/her opinion on general concepts such as: translation problems, translation strategies, translation competence and cultural/ideological implications.

Part II includes six questions which deal with the translation of *Il cane di terracotta*. Its objective is to investigate the same concepts mentioned above by focusing on this specific text. Moreover, it intends to analyse the subject's translation project for the whole novel and for each character marked by the use of dialect (PACTE: 2011).

Part III is a form which includes ten examples taken from the analysed novel. These examples comprise linguistic, pragmatic and extralinguistic problems and are related to the presence of social or geographical dialect (or both). The main objective of this questionnaire is to investigate the translator's awareness of the presence of linguistic variation problems in the text and to examine the criteria he/she used to solve them.

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