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Exploratory Tests in a Study of Translation Competence

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Hurtado Albir A., Beeby A., Fernández Rodríguez M., Fox O., Neunzig W., Orozco M., Presas M., Rodríguez Inés P., Romero L. (2002). Exploratory tests in a study of translation competence. *Conference Interpretation and Translation*, 4(2), 41-69.

This article describes the instruments and experimental tasks used in exploratory tests carried out by the PACTE Group. These tests were undertaken preparatory to the final experiment designed to determine the nature of Translation Competence in written translation-the first phase of a two-phase project designed to investigate the Acquisition of Translation Competence in written translation. A general overview of the characteristics of the research project is given, followed by a description of the aims and objectives of the exploratory tests, the experimental tasks and the instruments used. Some conclusions resulting from these tests are presented.

Keywords: translating competence, written translation, exploratory tests, PACTE, think-aloud protocols

1. Introduction

Unlike other disciplines in which numerous studies have been carried out to determine what constitutes expert knowledge in the field and how this knowledge is acquired, no generally accepted model of what

constitutes Translation Competence or the Acquisition of Translation Competence exists in the field of Translation Studies. Some proposals¹⁾ have been made with respect to written translation. Most, however, are limited in scope as they deal only with specific aspects of translation competence. None have been validated empirically, i.e., data was not collected and analysed within the framework of a structured research project.

Empirical research into written translation first began in the 1980s.²⁾ Most studies use introspective methods for data collection, such as *Think-Aloud Protocols* (TAP), i.e., as subjects verbalised the mental processes at work during the translation process these are recorded in protocols. Some studies also used questionnaires, direct observation, and/or video or computer recordings³⁾ for the purposes of data collection. Although these studies brought to light some of the competencies involved in translation competence, such as linguistic competence, extralinguistic competence, use of strategies etc.,⁴⁾ translation competence

1) Proposals related to the functioning of translation competence have been made by authors such as Lowe 1987, Bell 1991, Hewson y Martin 1991, Nord 1992, Pym 1992, Presas 1996, Hurtado Albir 1996a, 1996b, Beeby 1996, Hansen 1997, Hatim and Mason 1997, Risku 1998, Campbell 1998, Neubert 2000, etc. Proposals related to the acquisition of translation competence include those by Harris (1973, 1977, 1980), Harris and Sherwood (1978), Toury (1995), Shreve (1997) and Chesterman (1997).

2) For a review of empirical-experimental research in translation, see Orozco (2000, pp. 48-49).

3) For example, Krings (1986, 1987), Dancette (1994, 1997), etc. use questionnaires; Englund (1993), Halskov (1998, 1999), Lorenzo (1999), etc. use direct observation and/or computer recordings.

4) For example, studies have been carried out into translators' linguistic knowledge (Mondhal y Jensen, 1992), linguistic and extra-linguistic knowledge (Tirkkonen-Condit, 1992; Dancette, 1995; Alves, 1996), extra-linguistic knowledge (Dancette, 1994, 1997); abilities and aptitudes, such as creativity, emotional qualities and attention span (Kussmaul, 1991, 1995, 1997; Tirkkonen-Condit y Laukkanen, 1996); documentation (Atkins y Varantola, 1997;

itself was not the focus of these studies.

The absence of an established tradition of empirical research in the field of Translation Studies comparable to that which exists in other disciplines in the Social Sciences, such as Psychology, Pedagogy or Applied Linguistics, has meant that researchers have had to face the problem of the absence of validated measuring instruments with which to collect data.

To the best of our knowledge, only two studies have, to date, attempted an empirical approach to research into translation competence: Those of Lowe (1987) and Stansfield, Scott and Kenyon (1992). However, as Orozco (2000, p. 113ff) points out, Lowe does not, in fact, carry out an empirical study but rather proposes indicators of levels of translation competence. Stansfield, Scott and Kenyon devise an instrument known as the *Spanish into English Verbatim Translation Exam* (SEVTE), validated by reliability and validity tests. The authors themselves, however, draw attention to the fact that the results obtained cannot be generalised given the limited size of the sample (7 FBI employees).

As far as the acquisition of translation competence is concerned, although some empirical studies have been carried out to compare the performance of professional translators and that of students of translation⁵⁾, no longitudinal study has yet been carried out to monitor the acquisition of translation competence.

In view of the shortcomings detected in studies carried out in the field up to the present, the PACTE Group proposes to carry out an empirical study into the process of acquisition of translation competence. Since no empirically validated model of translation competence exists, an empirical

Livbjerg y Mees, 1990); strategies (Krings, 1986; Lörcher, 1991, 1992, 1993; Kiraly, 1995).

5) Cf., for example, Jäskeläinen (1987, 1989), Tirkkonen-Condit (1990), Tirkkonen-Condit y Jäskeläinen (1991), Kiraly (1995), Lorenzo (1999), etc.

- experimental study has been designed to determine the characteristics of translation competence prior to undertaking the study of the process of acquisition of translation competence. Since a dearth of validated instruments for use in empirical research in the field of Translation Studies also exists, the Group has designed and tested its own instruments for data collection.

1. An overview of the PACTE group research project

The research group PACTE (Process in the Acquisition of Translation Competence and Evaluation) was formed in October 1997. Its aim is to investigate the Acquisition of Translation Competence in written translation into and out of the mother tongue, using empirical-experimental research methods. Our research involves six language pairs: German-Catalan; German-Spanish; French-Catalan; French-Spanish; English-Catalan; English-Spanish.

1) Theoretical framework, Models developed

A holistic model of Translation Competence was developed in 1998, together with a dynamic model of the Acquisition of Translation Competence (PACTE, 1998, 2000; Beeby, 2000; Hurtado Albir, 1999, 2001; pp. 375-408) with the aim of validating both empirically. These models were based on: notions of "competence", "expert knowledge" and the learning process derived from other disciplines such as Pedagogy, Psychology and Language Teaching; models of "translation competence" and "acquisition of translation competence" currently available in the field of Translation Studies; and other empirical research into written translation.

In accordance with the holistic model of Translation Competence proposed by our Group, it is postulated that Translation Competence is

qualitatively different from bilingual competence. Like all expert knowledge, it comprises declarative and procedural knowledge, although the latter is held to be predominant. It is defined as 'the underlying system of knowledge, abilities and attitudes required to be able to translate—a system of competencies that interact, are hierarchical, and subject to variation'. These competencies include:

1. Language competence: grammatical, textual, illocutionary and sociolinguistic competence.
2. Extralinguistic competence: implicit or explicit knowledge of the world in general and specific areas including knowledge of two language cultures, encyclopaedic knowledge, subject knowledge and knowledge of translation.
3. Instrumental/professional competence: knowledge and abilities associated with the practice of professional translation, including knowledge and use of information resources, knowledge of and use of new technologies, and knowledge of the workplace.
4. Psycho-physiological competence: psycho-motor, cognitive and attitudinal resources of all kinds.
5. Transfer competence: the ability to complete the translation process from source text to target text.
6. Strategic competence: individual procedures, conscious or unconscious, verbal or non-verbal, used to solve problems encountered during the translation process.

Although all these translation competencies are involved in Translation Competence, in the 1998 PACTE model Transfer and Strategic Competence play a predominant role in the inter-relation between competencies. Transfer Competence plays a central role since all other competencies are subordinate to it, whilst Strategic Competence monitors and compensates for shortcomings in all other competencies, intervening when problems are detected and decisions must be made.

As far as the Acquisition of Translation Competence is concerned, it is postulated that the process of acquisition involves a development from novice knowledge (pre-translation competence) to expert knowledge (translation competence). It is a dynamic process which involves the integrated re-structuring and development of declarative and procedural knowledge, thereby developing and restructuring the different competencies which comprise Translation Competence. The development of procedural knowledge and, therefore, of Strategic Competence, is central to the Acquisition of Translation Competence, as are learning strategies.

The theoretical and working hypotheses of our study are based on these models.

2. Research design

An empirical-experimental study of the Acquisition of Translation Competence has been designed comprising two parts/phases: Phase I, an empirical study of Translation Competence; Phase II, an empirical study of the Acquisition of Translation Competence.

In each of these two phases, our investigation focuses on: (1) the translation process, through the collection and analysis of data obtained from the study of the mental processes at work and the competencies and skills required to be able to translate; and (2) the translation product, through the collection and analysis of data obtained from the texts translated by the subjects participating in the experiment.

Several different methods (qualitative and quantitative) are used to obtain data concerning the cognitive aspects of the translation process (cf. 2.1 and 2.2). These are then cross-referenced. In Phase I (the study of Translation Competence), an experimental group of 72 professional translators and a control group of 24 bilinguals who are not practising translators, are used. In Phase II (the study of the Acquisition of

Translation Competence) an experimental group of trainee translators will be used as subjects in a longitudinal study using repeated measurement over a period of two years. The group of professional translators will serve as a reference group. Homogeneity and representativeness of the test and control groups will be established by means of a pre-study questionnaire; subjects that may introduce extraneous variables will be excluded.

An electronic corpus of translated texts will be constructed which will be: (1) multi-lingual; it will include protocol texts in French, German, English, Catalan and Spanish, together with the translations of each text produced by subjects participating in the study (2) documented; linguistic and extralinguistic data will be gathered on texts and subjects (3) tagged for parts of speech (4) annotated; competency-linked indicators will be marked; and (5) text-aligned; source texts will be aligned with their translations into and out of the foreign language as will translations of the same text. In Phase II of the study, the corpus constructed will be of similar characteristics; it will, however, include texts translated by students at different stages of their acquisition of translation competence (a period of 2 years). The type of alignment used will allow different types of comparative analysis to be carried out, e.g. between source texts and target texts; between translated texts in each language pair; between texts translated by professionals, bilinguals and students; between texts translated by students at different stages of their acquisition of translation competence, etc. Data analysis will be carried out using WordSmith Tools, a corpus management tool. As far as is possible under controlled conditions, the corpus is a representative sample of the performance of professional translators which may be cross-referenced with data obtained from the study of the translation process.

Each of the two phases of the study (Phase I: the study of Translation Competence; Phase II: the study of the Acquisition of Translation

Competence) comprises different stages of investigation. These include tests preparatory to the final experiment (exploratory tests and pilot test) and, finally, the experiment.

3. Current stage of research.

The conceptual stage of our study began with the construction of a holistic model of Translation Competence and that of a dynamic model of the Acquisition of Translation Competence. It also involved the elaboration of theoretical and working hypotheses have also been established. The methodological stage began with our research) study design and the development of measuring instruments and experimental tasks (PACTE, 1998, 2000, 2001; Beeby, 2000; Hurtado Albir, 1999, 2001, pp. 375-408).

Our research is currently focused on the preparatory stages of our empirical study of Translation Competence: the exploratory tests.

II. Exploratory tests in translation competence

To date, two exploratory tests have been carried in preparation for the final experiment on Translation Competence (cf. 1.2.).

In the first, subjects were members of the PACTE research group, and in the second, six professional translators. Instruments and experimental tasks designed for use in the final experiment were used. Three language pairs were used: English-Spanish; German-Spanish; French-Spanish. The aim of our exploratory tests was to:

- (1) test the holistic model of Translation Competence developed (the competencies involved and the relationship between each) as well as the theoretical and working hypotheses;

- (2) test and improve the measuring instruments and experimental tasks to be used in the final experiment;
- (3) establish empirical hypotheses;
- (4) select variables.

The experimental tasks and instruments used in our exploratory tests were as follows.

1. Experimental tasks

The test environment, which attempted to simulate as closely as possible the translator's workplace, was located in the library of the Universitat Autònoma de Barcelona. Subjects were provided with a computer connected to Internet in which dictionaries and CD-Roms had been installed. A selection of reference books (dictionaries, encyclopaedias, etc.) was made readily available and a guide to the library facilities was provided should subjects require more specific documentation.

The experimental tasks undertaken in order were:

1. The completion of a questionnaire to obtain information about the subject (Questionnaire 1).
2. The translation of two texts, one into and one out of the foreign language. As subjects translated each text, the process followed was monitored and recorded by means of a user monitoring program (PROXY) that allows for the recording of the activities that the user carries out on line. Simultaneously, subjects' activities which could not be recorded on-line (consultation of printed materials; reading of the source or target texts, etc.) were observed and recorded in observation charts by researchers positioned discreetly at a distance behind subjects.
3. The completion of a questionnaire (Questionnaire 2) after translating each of the two texts.

4. The completion of a further questionnaire (Questionnaire 3) concerning the test setting.
5. The completion of a retrospective, dialogued TAP, whilst viewing the recording of the subject's translation process on a computer screen (PROXY).

To ensure the ecological validity of the experiment, subjects were informed that the test was part of a study on the use of standardised texts in the training of translators, and of our ability to simulate an authentic translator's work environment. Subjects were not informed that they were being observed or recorded until after completion of Questionnaire 3. At this point they were told of the real objective of the experiment and asked if they wished to participate in the dialogued TAP. Subjects were assured that the data obtained was confidential and that should they not wish to participate any further in the study the recordings would be destroyed.

The translations produced will be used to construct an electronic corpus for cross-reference purposes.

2. Instruments

Our data collecting instruments include: a commercial software program (PROXY); protocol texts for translation into and out of the foreign language; questionnaires; a direct observation chart; and retrospective, dialogued think-aloud protocols (TAPs). Examples of the instruments used in the exploratory tests are included in Appendices I-III.

1) Software program PROXY

PROXY is a user monitoring program, i.e. a program which permits the

remote control of workstations and users connected to the same network. A wide range of similar products are commercially available, although they differ in the degree to which they can monitor and record data from remote workstations. A programme of this kind usually serves to manage and maintain networks and systems installed in a centre. The programme PROXY was first presented to the group as a prospective data collecting instrument by one of the group's members, W. Neunzig, as a result of a study of user monitoring programmes carried out by a colleague in the Department of Translation and Interpreting within our Faculty. The PACTE group has adopted PROXY⁶⁾ as an appropriate system to carry out its studies as it is able to record and monitor, in real time, subjects' activities during the translation process. These recordings may then be stored for subsequent viewing and analysis.

Running PROXY for the purposes of our research requires the use of three computers. The main computer establishes the connection between two other computers, or remote workstations, and stores data from both. One of these two remote workstations monitors the other where the subject participating in the experiment is at work.

The use of PROXY has proved most useful in our study, particularly in relation to ecological validity. The advantages it offers are as follows: (1) it is compatible with Microsoft Windows, so that subjects can work with the text processor they are most familiar with; (2) it can be used in conjunction with other Windows applications, so that subjects can such as carry out information searches on the Internet or in on-line dictionaries and CD-Roms; (3) all subjects' activities may be viewed and recorded in real time; (4) all subjects' activities during the translation process can be

6) The program PROXY was first presented to PACTE as a prospective data collecting instrument by one of the group members, W. Neunzig, after a study of user monitoring programs was carried out by a colleague, R. Piqué, in the Departament de Traducció i d'Interpretació of the Universitat Autònoma de Barcelona.

recorded and the data obtained cross-referenced with data collected using other instruments (direct observation charts, questionnaires, TAPs, etc.); (5) subjects are unaware of the fact that their activities are being monitored and recorded.

A description of the PROXY interface and some examples of recordings of translators' activities are included in Appendix I of this article.

2) Protocol texts for translation into and out of the foreign language

Protocol texts were selected for subjects to translate, one into and one out of the foreign language. These texts were typically: (1a) authentic texts that could well be translated by professional translators; (2b) brief (150 words approx.); (3c) non-specialised, although they did require some extra linguistic knowledge (concerning subject matter, cultural and general, or world knowledge); and (4) d) posed a number of translation problems that served as indicators of specific translation competencies since these competencies had to be activated for the problem to be solved.

For texts to fulfil all these requirements, it was at times necessary to make some alterations to pre-selected texts, although these alterations in no way affected the overall coherence or authenticity of the texts.

Each text included several at least one indicators of each type of translation competencyies. Indicators of Strategic Competence and Transfer Competence were not, however, included since these can only be observed during the completion of experimental tasks, se competencies are not directly observable in a text but rather in the experimental tasks, as a result of direct observation, or through thanks to PROXY recordings.

Competency-linked indicators included in protocol texts were:

1. Indicators of language competence (L). These are lexical, syntactic and textual problems (cohesion) which require the activation of

knowledge of two language systems.

2. Indicators of extralinguistic competence (E). These are problems related to subject matter, cultural and world or general knowledge.
3. Indicators of instrumental/professional competence (I/P). These are problems stemming from the translation brief itself which require creative solutions or complicated information searches.
4. Indicators of psycho-physiological competence (PF). These are problems to do with text coherence, style, puns??), etc. which involve creative thinking and/or logical reasoning.

Given the interaction between the different competencies involved in the translation process, the classification of a translation problem as indicator of one competency or another depends on which competence is thought to be the one most likely to be activated when solving the problem. Some problems may be indicators of more than one competence. In an attempt to simplify data analysis and to help to establish our empirical hypotheses, the number of competencies linked to each indicator has been limited. Examples of protocol texts used in the exploratory tests are included in Appendix II; pre-selected competency-linked indicators are marked.

3) Questionnaires

Three different questionnaires were used⁷⁾:

1. The first, Questionnaire 1, was administered to subjects before beginning a test, and was used to obtain information concerning subjects' formal training as a translator, their professional experience (years of professional activity, type of texts translated, number of translations into the foreign language, number of

7) For reasons of space questionnaires have not been included in the Appendix.

translations out of the foreign language) and their concept of translation.

2. Questionnaire 2, administered to subjects after translating each text, was used to obtain information concerning the translation problems encountered in the texts, and the strategies involved in their solution. In addition, questions designed to obtain information concerning the texts used were also included, i.e. the subject's assessment of the degree of difficulty of each text and of the pre-selected competency-linked indicators, the likelihood of texts being translated in the professional workplace.
3. Questionnaire 3, administered at the end of the tests, was designed to obtain the subject's assessment of the test environment and whether or not it effectively simulated the translator's work environment.

4) Direct observation chart

A direct observation chart was designed to record subjects' activities while translating. The activities recorded in these charts were those that PROXY could not record (Appendix III).

As a result of the first series of exploratory tests, carried out using members of the research group as subjects, a catalogue of directly observable activities was drawn up: first-time reading of the source text (LEO); re-reading of the source text (REO); reading of the target text (LET); revising the target text (RET); underlining (SUB); making notes (NOT); comparing source text and target text (COM); and consultation of printed materials (CON).

Data recorded in the charts included: the time at which an activity was initiated (as registered by the PROXY programme); the type of activity initiated; the text segment affected; and any other associated activities.

5) Retrospective dialogued think-aloud protocol

A tape-recording was made of a retrospective dialogued think-aloud protocol (TAP) with each subject in the presence of the researcher while viewing the recording of the subject's translation process on screen. This TAP serves to provide additional information concerning the subjects' activities during the translation process (problems encountered; decision-making processes involved, the rationale behind certain information searches, etc.) for cross-referencing with data obtained from other sources.

III. First conclusions obtained from the exploratory tests

Findings obtained from the different instruments used in these tests were collated and cross-referenced using custom-designed charts. Although an exhaustive analysis has yet to be made of the results obtained, it has become clear to the Group that certain changes must be made in the measuring instruments used, and the 1998 model of Translation Competence should be revised.⁸⁾

1. Measuring instruments and experimental tasks

Our tests have confirmed that the software program PROXY is a

8) These findings were presented in the *II Encontro Internacional de Tradutores* (Belo Horizonte, 23-27 July, 2001) and in the *Third International EST Congress* (Copenhagen, 30 August - 1 September, 2001).

particularly useful instrument for observing the translation process, and the experimental tasks designed by the Group are appropriate for studying the cognitive dimensions of translation competence.

Although more detailed analysis is required, it would appear that some improvements are, nevertheless, required in the measuring instruments developed:

1. Protocol texts. Despite the difficulties involved, it has been concluded that the protocol texts selected should be more homogenous (length, difficulty, genre).
2. Competency-linked indicators. It would appear that only two types of indicators need be identified in texts, i.e. indicators of linguistic and extra-linguistic competence. These indicators are readily identifiable in texts, and there would appear to be a close link between indicator and competence. This link is not so clear in the case of instrumental/professional and psycho-physiological competence which may be seen to intervene in the event of shortcomings in these competencies.
3. Questionnaires. Questions concerning subjects' knowledge of the professional workplace and documentary resources will be incorporated to obtain further data concerning instrumental/professional competence, and questionnaires will be simplified to promote ease of use and reduce time taken in answering.

2. Model of Translation Competence

Our tests have enabled us to observe, and more precisely define, a much wider range of activities carried out by subjects during the translation process (cf. Appendix III). Some of these activities were directly observed, whilst others were observed using PROXY recordings:

1. Directly observed activities: first-time reading of the source text;

- re-reading of the source text; revising the target text; underlining; making notes; comparing source text and target text; and the consultation of printed materials.
- 2. Activities observed using PROXY: immediate solution to a translation problem; non-immediate solution to a translation problem (after a pause, consultation, etc.); pause; no solution to a translation problem (postponed solution); solution of a postponed solution; temporary solution; final solution of a temporary solution; on-line consultation; use of new technologies (Internet, text processing); and corrections (lexical items, grammar, cohesion, coherence, etc.).

When attempting to establish links between subjects' activities and specific translation competencies as a first step towards defining our empirical hypotheses (i.e. what we wish to observe and contrast in our experiment) we have found it necessary to revise the definition and functions of each of the translation competencies included in our 1998 model of Translation Competence.

The revision of our model of Translation Competence has largely focused on our changing concept of the importance of the role played by Strategic Competence within Translation Competence as a whole. It is becoming increasingly clear that Strategic Competence plays a crucial role in Translation Competence since it is used to: plan the translation project; activate, monitor and compensate for shortcomings in other translation competencies; detect translation problems; apply translation strategies; make decisions; monitor and evaluate both the translation process and the partial results obtained in relation to the intended target text.

Transfer Competence, which was previously considered to play a central role in Translation Competence, would now appear to be equivalent to Translation Competence itself, i.e. the sum total of all translation competencies: the ability to complete the process of translating a source text into a target text.

Our definition of Linguistic Competence has also been revised. It is currently defined as 'Bilingual Competence' and comprises pragmatic, socio-linguistic, textual, lexical and grammar competence in any language pair.

Given its importance within translation competence, knowledge about translation, which had previously been ascribed to extra-linguistic competence, would now appear to constitute a specific competence. This competence would comprise declarative and operative knowledge of the principles that govern the translation of text (units of translation, processes required, methods and procedures in translation, types of problems etc.) as well as different aspects of professional translation (knowledge of the market, type of translation task etc.). Data collection would be facilitated.

Finally, psycho-physiological competence would appear to warrant a status somewhat different from that of other competencies since it forms an integral part of all expert knowledge. Rather than 'competence' it would perhaps be more appropriate to speak of psycho-physiological 'mechanisms'.

Any changes made to our model would obviously be reflected in our theoretical and working hypotheses.

Once we have concluded the analysis of the data obtained from our exploratory tests, the next stage of our research will be to establish our empirical hypotheses and select the variables to be observed in our final experiment. Our improved instruments will be tested in pilot studies carried out prior to the final experiment.

Although ours is an extended research project, and not without its difficulties, we believe an attempt must be made to investigate the acquisition of translation competence empirically and that translation

competence and its acquisition can be studied cross-sectionally and longitudinally using a methodology similar to that described in our research.

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Appendix 1 Proxy



(Note: image/figure file PAC1*. in folder Proxy)

Appendix 2 Protocol Texts

LANGUAGE: SPANISH

Translation brief: This text has been taken from 'La Guía de Toledo' which is to be translated into English, French, and German for distribution world-wide.

Taller del Moro

Próximo a la iglesia se encuentra el Taller del Moro (I/P), (L) edificio construido en la primera mitad del siglo XVI, (L) en el que destaca su magnífico artesonado (E) (I/P) mudéjar (I/P). Desde 1963 es un museo estatal en el que se pueden ver diversas muestras (PF) de arte decorativo (I/P) islámico (I/P) y mudéjar halladas en Toledo. En tiempos debió de ser una dependencia (L) del muy extenso (L) palacio (L) de los condes de Fuensalida. Este palacio es en la actualidad la sede de la Presidencia (PF) de la junta de Comunidades de Castilla-La Mancha (I/P). En él destaca su patio de dos alturas (PF, E) con buenas (L) (PF) zapatas (E)(I/P) sobre pilastras (E)(I/P). Todo el edificio conserva restos mudéjares y platerescos (I/P).

(Porres de Mateo, J. and de Giles, F. (1991) *Guía de Toledo hoy*, Madrid: ANAYA, p. 63.)

LANGUAGE: FRENCH

Translation brief: You have been asked to provide the Spanish version of a Web page on wines. Translate the following text into Spanish.

Les vignobles de Bordeaux

L'apparition de la vigne dans notre région remonte au premier siècle de notre ère lorsque les Bituriges vivisques (I/P) décident de planter leur propre vignoble avec un nouveau cépage, le Biturica (I/P), ancêtre des (PF) Cabernets.

En 1152, Aliénor d'Aquitaine (E) (I/P), épouse Henri Plantagenet (E) (I/P). Dès lors, naissent des échanges commerciaux très importants; (L) les Anglais exportent des aliments, textiles et métaux, et importent du vin de Bordeaux, (L) Ils le nomment Claret (PF) (I/P) en raison de sa couleur claire.

À cette époque, les expéditions se font par tonneaux d'une capacité de 900 litres, Le tonneau (PF) (I) devint par la suite l'unité de volume internationale pour le jaugeage (L) des navires.

Au XVIII^e siècle les Iles d'Amérique (E) assurent la croissance des exportations viticoles bordelaises (L). Cependant, au milieu du XIX^e siècle, une terrible maladie frappe le vignoble: l'oïdium (I/P). C'est en 1857 qu (L) on découvre que des procédés de soufrage (PF) peuvent enrayer la maladie. Une fois conjuré le péril de l'oïdium, le vignoble girondin (E) (PF) entre dans une ère de prospérité dont témoigne le fameux classement de 1865, recensant une partie des crus (L) de la Gironde (E) (PF).

(Adapted Web page)

LANGUAGE: GERMAN

Translation brief: You have been asked to provide the Spanish version of a Web page on Vienna. Translate the following text into Spanish.

Strauss' Leben und Werk

Teil 1: Wie der Vater, so der Sohn (L)

Johann Strauss Vater war vom Bierwirtssohn (L) zum Hofball-Musikdirektor (E, I/P) avanciert. Gemeinsam mit seinem Freund Josef Lanner machte er den Walzer salonfähig (PF). Johann, der begabteste seiner Söhne, kam am 25. Oktober 1825 in der damaligen Wiener Vorstadt Lerchenfeld zur Welt. Das Geburtshaus ist nicht erhalten, die Adresse entspricht in etwa 7 (E), Lerchenfelder Straße 15 (I/P). Fünf Geschwister folgten.

Der ehrgeizige Vater (L) schickte die Söhne aufs Polytechnikum (E). Aber Johann Strauss Sohn machte lieber Musik: Und (L) debütierte 1844, mit 19 Jahren, als Konzertdirektor (E) im Kasino Dommayer.

Der junge Strauss wurde seinem Vater ein gefürchteter Konkurrent. Dem "Alten" war sogar eine Anzeige recht (L), um den Schani gerufenen Junior (L) aus dem Feld zu schlagen (L). Doch dieser wußte sich zu behaupten (PF). Und allen Seiten schmeicheln: den Aufständischen des Jahres 1848 mit dem Revolutionsmarsch (I/P), dem frisch gekrönten Habsburger (L, PF) mit dem Kaiser-Franz-Joseph-Marsch (I/P) und dem Besitzer eines der luxuriösesten Wiener Tanzpaläste mit der Odeon-Quadrille (I/P).

Schani (L) wohnte bis zum 37. Lebensjahr unter den Fittichen seiner Mama. Papa Strauss (L, PF) bevorzugte das Heim einer jungen Modistin, mit der er 7 Kinder hatte...

(Web page on Vienna)

LANGUAGE: ENGLISH

Translation brief: A company wishes to recruit staff for their Madrid branch. Translate the following job advertisement into Spanish.

CRÛCHE SPECIALISTS

Exciting opportunities (PF) to be part of a fast growing operation (PF)
Competitive salary (L)+ car + benefits

Safeway (E) is not only one of the country's largest retailers (E), it is also one of the most innovative. We have helped pioneer the concept of in-store crèche facilities (PF) and are now fully committed to expanding (PF) this popular service by introducing crèche facilities to an increasing number of our stores. Can you help us develop our operations? (L) (PF)

We are looking to recruit two Crèche Specialists (PF) to be responsible for a number of crèches in designated geographical areas. Liaising (L) with staff at all levels, you will be fully involved in all recruitment, training (L) and staff development issues (PF)... monitoring standards and strictly maintaining all statutory (E) and company requirements. Another challenging aspect (PF) of your brief (L) will be to make sure new crèches are ready for registration (E).

Fully conversant with (L) Part X of the Children Act 1989 (I/P), you must have at least five years' management experience gained within a group care environment (PF) catering (L) for young children. A child care (I/P) or social work qualification (I/P) is essential as you will liaise closely with local Social Services (I/P).

In return you will enjoy excellent prospects (L), a competitive salary together with a generous reward package (E) including private health insurance, staff discount and contributory pension.

(The Economist, 1995)

Appendix 3
Direct observation chart

Time	Activity				Segment affected	Other activities
	LEO	REO	LET	RET		
	SUB	NOT	COM	CON		
	LEO	REO	LET	RET		
	SUB	NOT	COM	CON		

(Note: image/figure file PAC2*.* in folder ObsChart)

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