# CHARACTERISTICS OF TRANSLATION COMPETENCE: RESULTS OF THE PACTE GROUP'S EXPERIMENTAL RESEARCH

**PACTE Group**
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INTRODUCTION

I.- RESULTS OF DEPENDENT VARIABLES

II.- ANALYSIS OF THE TC CORPUS RESULTING FROM THE EXPERIMENT

III.- CONCLUSIONS

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# INTRODUCTION

**Main objective:**

➢ Identify the distinguishing features of Translation Competence (TC)

**Studies completed:**

✓ Exploratory studies TC (2000-2001)

✓ Pilot test TC (2004)

✓ **Experiment TC (2005-2006)**

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## EXPERIMENTAL UNIVERSE

- Professionals working with foreign languages

## SAMPLE

- Expert translators (35)

- Teachers of foreign languages (24)

**6 language combinations**

**Independent variable**

  ❖ Degree of expertise in translation

**Dependent variables** -18 indicators-

  ❖ Knowledge about translation

  ❖ Efficacy of the translation process

  ❖ Decision-making

  ❖ Translation project

  ❖ Identification and solution of translation problems

  ❖ Use of instrumental resources

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# EXPERIMENTAL TASKS

- Direct translation [direct observation + remote observation using Proxy + recording made using Camtasia]

- Completion of a questionnaire about the problems encountered in the translation

- Inverse translation [direct observation + remote observation using Proxy + recording made using Camtasia]

- Completion of a questionnaire about the problems encountered in the translation

- Completion of a questionnaire about translation knowledge

- Retrospective interview

# I. RESULTS OF DEPENDENT VARIABLES

# ACCEPTABILITY

**(PACTE 2009)**
*Quality of the translation product*
Transversal indicator

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## EMAIL VIRUS STRIKES IN NEW FORM

Computer users were warned last night to be on the lookout for an email virus that can steal confidential information and allow hackers to take control of infected machines. The virus, a new variant of the BugBear email worm that infected tens of thousands of computers around the world last October, began to spread rapidly from Australia to Europe and the USA at around 8am yesterday. According to MessageLabs, a **Cheltenham-based virus filtering firm** which reported about 30,000 infected messages in 115 countries, the **propagation rate** of BugBear.B almost **doubled** every hour throughout the morning. There was also a huge **surge** as US users came online. Like its predecessor, the variant spreads by sending itself as an attachment to every address in an infected machine's email address book. To disguise where it came from, it uses different subject headings. As well as searching for anti-virus software and disabling it, BugBear.B installs a **keylogger** to record what the user types, which may allow hackers to record confidential information such as credit card details and passwords. It also installs **a "Trojan horse" program which could allow a hacker to take remote control of infected machines**. [...]

*The Guardian* - Friday, June 6, 2003

- WURM IN DER LEITUNG
- BUGBEAR.B, LE VIRUS INFORMATIQUE QUI LIT PAR – DESSUS L'ÉPAULE DE SES VICTIMES

-Tastatureingaben von PC-Nutzern nach Kreditkartennummern und Ähnlichem überwacht
- Enregistrer les caractères tapés sur le clavier

- Schädling / E-Mail Würmer / Vorgängervariante
- Le ver / résurgence / ses congénères

- Download-Verzeichnis
- Édition de logiciels antivirus

- Dateien-Tauchbörse Kazaa
- Soumissions, des communications du virus

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# ACCEPTABILITY
## Results



|  |  | Subjects | |
|---|---|---|---|
|  |  | Translators | Teachers |
| Acceptability Media Direct | Mean | 0.73 | 0.49 |
|  | Median | 0.80 | 0.45 |
| Acceptability Mean Inverse | Mean | 0.52 | 0.48 |
|  | Median | 0.50 | 0.40 |
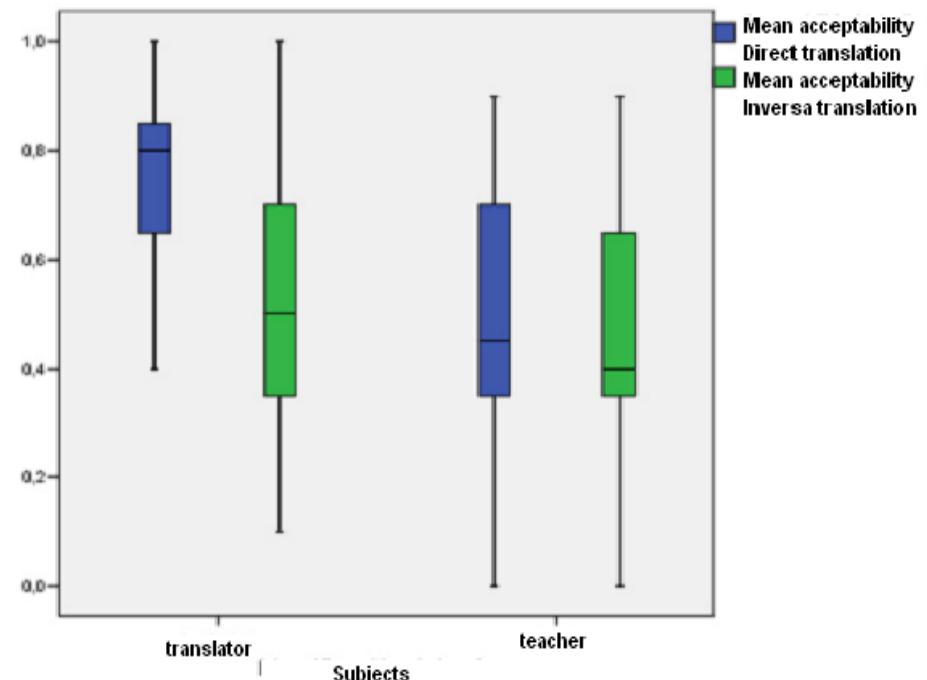
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# KNOWLEDGE ABOUT TRANSLATION

## (PACTE 2008)

*Subjects' knowledge of the principles of translation
and aspects of the translation profession*

❑ Instrument:

- ✓ Questionnaire on knowledge about translation
  - ▪ Categories:
    - ✓ Dynamic: textual, communicative and functionalist concept of translation
    - ✓ Static: linguistic and literal concept of translation

❑ Indicators:

- ✓ Dynamic index
- ✓ Coherence coefficient

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## Differences between the two groups of subjects

|  | Mean | Median | Max. | Min. |
|---|---|---|---|---|
| Translators | 0.273 | 0.200 | 0.900 | -0.200 |
| Teachers | 0.088 | 0.150 | 0.625 | -0.400 |

**The dynamic index of the translators is significantly higher than that of the teachers.**

|  | Mean | Median | Max. | Min. |
|---|---|---|---|---|
| Translators | 0.37 | 0.50 | 1.00 | 0.00 |
| Teachers | 0.27 | 0.50 | 0.50 | 0.00 |

**There is no significant difference between the two groups (translators and teachers) in terms of coherence.**

**→ Both groups are coherent**

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# TRANSLATION PROJECT

## (PACTE 2011a)

*The subject's approach to the translation of a specific text and of the units it comprises*

# **PACTE**    **TRANSLATION PROJECT (TP)**

❑ Instruments:

    ✓ Questionnaire on translation problems

    ✓ Retrospective interview

    *What were your priorities when translating the text?* (overall TP)

    *What were your priorities when solving it?* (TP of each Rich Point)

❑ Indicators:

    ✓ Dynamic index of overall TP

    ✓ Dynamic index of TP of each Rich Point

    ✓ Coherence coefficient of overall TP and of each Rich Point

    ✓ Acceptability

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Overall Translation Project (direct translation)

PERCENT
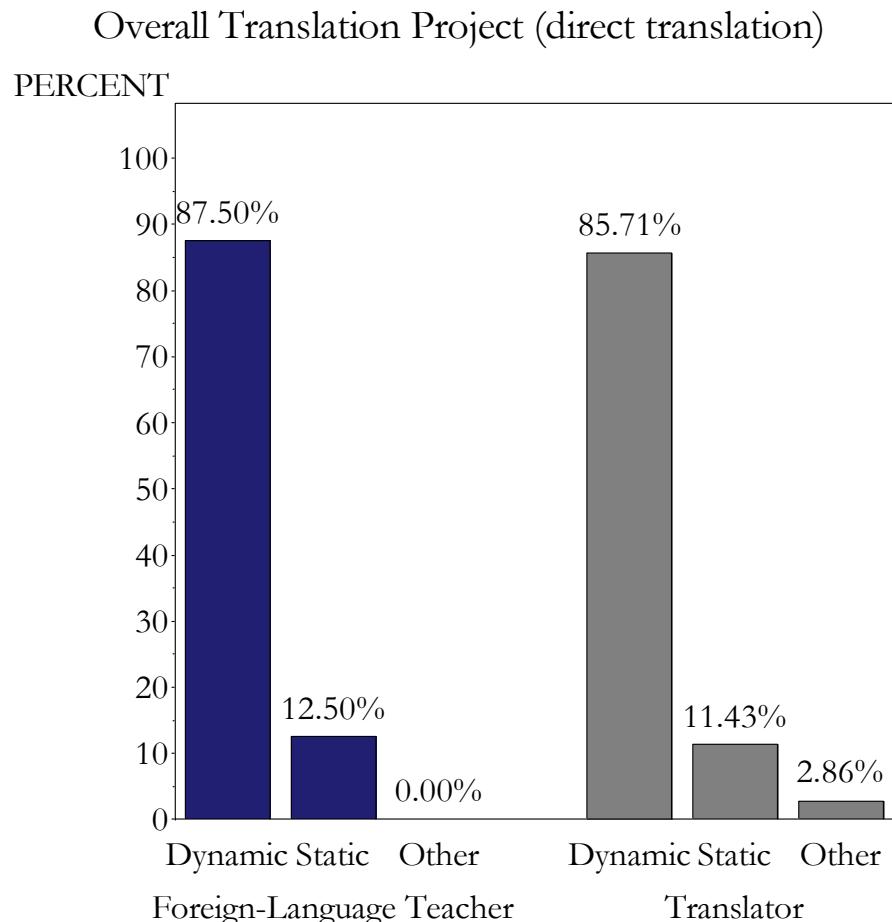


No significant differences between translators and teachers in direct translation

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Overall Translation Project (inverse translation)
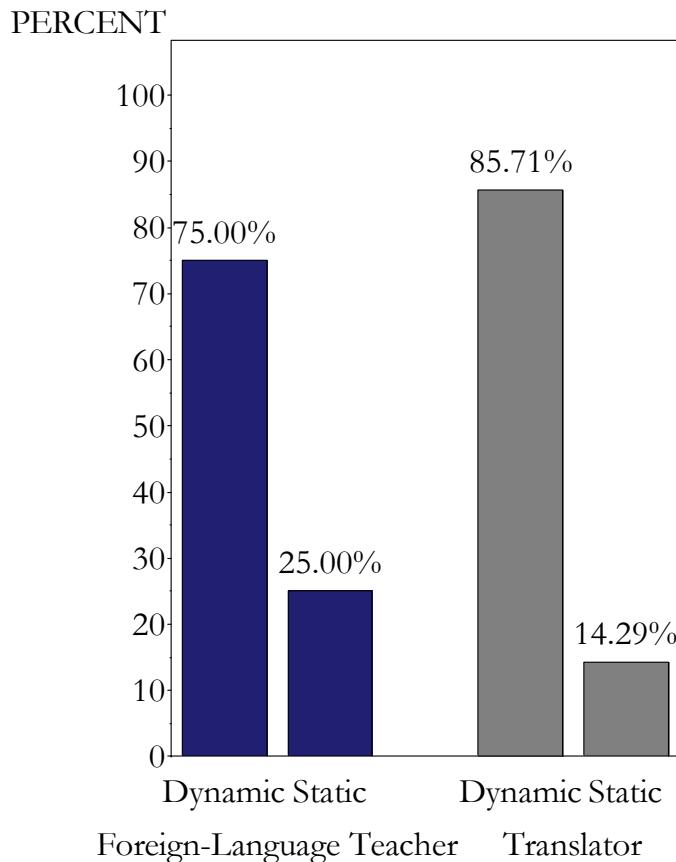
PERCENT



Differences between translators and teachers in inverse translation

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Table of id by idin

| id | idin(Dynamic Index) | | | |
|---|---|---|---|---|
| | dynamis m: 25% or less | dynamis m: 26% - 74% | dynamism : 75% or more | Total |
| Frequency Percent Row Pct Col Pct | | | | |
| Foreign-Language Teacher | 1 1.69 4.17 33.33 | 7 11.86 29.17 53.85 | 16 27.12 66.67 37.21 | 24 40.6 8 |
| Translator | 2 3.39 5.71 66.67 | 6 10.17 17.14 46.15 | 27 45.76 77.14 62.79 | 35 59.3 2 |
| Total | 3 5.08 | 13 22.03 | 43 72.88 | 59 100. 00 |

Both groups' approach to their translation was dynamic.

This may be attributed to the fact that both groups were language professionals and their aim, by default, was to communicate.

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Table of id by idin

| id | idin(Dynamic Index) | | | |
|---|---|---|---|---|
| Frequency<br>Percent<br>Row Pct<br>Col Pct | dynamis<br>m:<br>25% or<br>less | dynamis<br>m:<br>26% -<br>74% | dynamism<br>:<br>75% or<br>more | Total |
| Foreign-Language<br>Teacher | 1<br>1.69<br>4.17<br>33.33 | 7<br>11.86<br>29.17<br>53.85 | 16<br>27.12<br>66.67<br>37.21 | 24<br>40.6<br>8 |
| Translator | 2<br>3.39<br>5.71<br>66.67 | 6<br>10.17<br>17.14<br>46.15 | 27<br>45.76<br>77.14<br>62.79 | 35<br>59.3<br>2 |
| Total | 3<br>5.08 | 13<br>22.03 | 43<br>72.88 | 59<br>100.<br>00 |

| | | Identificación del sujeto | |
|---|---|---|---|
| | | traductor | profesor |
| Aceptabilidad Media Directa | Media | ,73 | ,49 |
| | Mediana | ,80 | ,45 |
| Aceptabilidad Media Inversa | Media | ,52 | ,48 |
| | Mediana | ,50 | ,40 |

Although the teachers' approach to translation overall was dynamic, their solutions to specific translation problems were not as acceptable as those of translators.

Explanation: teachers' lack of expertise.

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If we consider the mean percentages obtained for the translation of all the Rich Points, the translators' approach to translation is more dynamic than that of the teachers

Profesores
TRADUCCIÓN DIRECTA

| N | Mean | Std Dev | Minimum | Maximum |
|---|---|---|---|---|
| 5 | 52.50 | 6.32 | 45.83 | 62.50 |

Traductores
TRADUCCIÓN DIRECTA

| N | Mean | Std Dev | Minimum | Maximum |
|---|---|---|---|---|
| 5 | 71.43 | 11.43 | 54.29 | 85.71 |

Profesores
TRADUCCIÓN INVERSA

| N | Mean | Std Dev | Minimum | Maximum |
|---|---|---|---|---|
| 5 | 51.67 | 6.32 | 45.83 | 58.33 |

Traductores
TRADUCCIÓN INVERSA

| N | Mean | Std Dev | Minimum | Maximum |
|---|---|---|---|---|
| 5 | 68.57 | 12.29 | 48.57 | 80.00 |

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id=Foreign-Language Teacher

| Label | Mean | Median | Minimum | Maximum | Std Dev |
|---|---|---|---|---|---|
| Coherence Coefficient (direct translation) | 0.563 | 0.500 | 0.000 | 1.000 | 0.425 |
| Coherence Coefficient (inverse translation) | 0.688 | 0.750 | 0.000 | 1.000 | 0.355 |

id=Translator

| Label | Mean | Median | Minimum | Maximum | Std Dev |
|---|---|---|---|---|---|
| Coherence Coefficient (direct translation) | 0.786 | 1.000 | 0.000 | 1.000 | 0.389 |
| Coherence Coefficient (inverse translation) | 0.814 | 1.000 | 0.000 | 1.000 | 0.345 |

1. Teachers are coherent in both direct and inverse translation.
2. The group of translators is, however, more coherent than the group of teachers in both direct and inverse translation.
3. Neither group behaves differently when translating into or out of the foreign language – they are equally coherent independent of directionality.

→ The selection of subjects in the experimental groups was appropriate. 23

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# 'Dynamic Translation Index'

## (PACTE 2011a)

*Translation project & Knowledge about translation*

- Translation project (TP): *Procedural knowledge*

- Knowledge about translation: *Declarative knowledge*

**'Dynamic translation index' (*DTI*) =**

*Dynamic index of TP overall*
+
*Dynamic index of TP for Rich Points*
+
*Dynamic index of knowledge about translation*

(DTI is not the average of these three indices, but the sum of all three)

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**Foreign-Language Teacher**

| | Analysis Variable : idinsuma Suma de Dinamismo | | | | |
|------|--------|---------|---------|---------|-----|
| Mean | Median | Minimum | Maximum | Std Dev | N |
| 0.921 | 1.200 | -1.300 | 2.250 | 0.968 | 24 |

**Translator**

| | Analysis Variable : idinsuma Suma de Dinamismo | | | | |
|------|--------|---------|---------|---------|-----|
| Mean | Median | Minimum | Maximum | Std Dev | N |
| 1.559 | 2.100 | -1.800 | 2.900 | 1.087 | 35 |

**Kruskal-Wallis Test**

| | |
|------------------|--------|
| Chi-Square | 8.5309 |
| DF | 1 |
| Pr > Chi-Square | 0.0035 |

The group of translators is significantly more dynamic than the group of teachers.

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Scattered plot of DTI + acceptability:
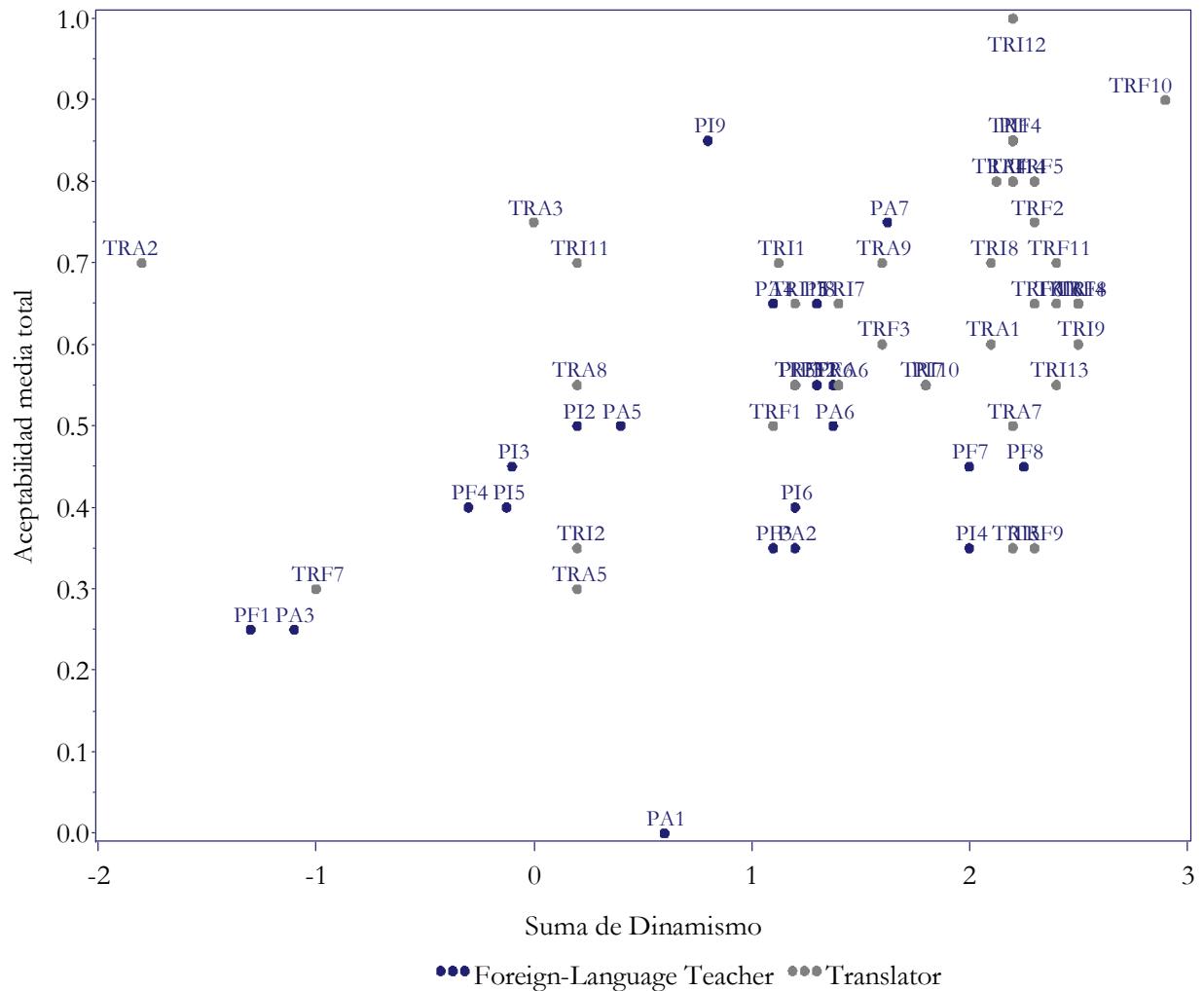
Both the Dynamic Translation Index and acceptability move in the same direction; as one increased, so did the other.

# IDENTIFICATION AND SOLUTION OF TRANSLATION PROBLEMS

**(PACTE 2011b)**

*Difficulties encountered by subjects when carrying out a translation task*

# PACTE — IDENTIFICATION AND SOLUTION OF TRANSLATION PROBLEMS

- ❑ Instruments:
  - ✓ Questionnaire on translation problems
  - ✓ Retrospective interview

*How difficult do you think this text is to translate?*

*Name 5 of the main problems you found when translating this text and answer the following questions about each:*
        *Why was it a problem?*
        *Are you satisfied with the solution?*

- ❑ Indicators:
  - ✓ Coefficient of perception of the overall difficulty of the translation of the text
  - ✓ Identification of prototypical translation problems
  - ✓ Characterisation of prototypical translation problems
  - ✓ Coefficient of satisfaction
  - ✓ Acceptability

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|  | **DIRECT TRANSLATION** | **INVERSE TRANSLATION** |
|---|---|---|
| **TEACHERS** | **0.43** | **0.70** |
| **TRANSLATORS** | **0.28** | **0.63** |

- **Between groups**: teachers perceived direct and inverse translation to be more difficult than translators
- **Directionality**: both groups perceived inverse translation to be more difficult than direct translation

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■ No relation exists between subjects' perception of the overall difficulty of the translation and the acceptability of the results obtained

|  | Pearson (r) coefficient of correlation | Degree of freedom | Significance |
|---|---|---|---|
| **Translators (direct)** | 0.13 | 32 | Not significant |
| **Teachers (direct)** | 0.01 | 22 | Not significant |
| **Translators (inverse)** | 0.04 | 32 | Not significant |
| **Teachers (inverse)** | 0.19 | 22 | Not significant |

# 2. SUBJECTS' IDENTIFICATION OF PROTOTYPICAL TRANSLATION PROBLEMS

■ **Direct translation**

| DIRECT | RP 1 Title | RP 2 Technical term | RP3 Reference | RP 4 Apposition | RP 5 Comprehension and reformulation |
|---|---|---|---|---|---|
| Translators | 62.9% | 51.4% | 54.3% | 40.0% | 22.9% |
| Teachers | 33.3% | 45.8% | 62.5% | 50.0% | 33.3% |

■ **Inverse translation**

| INVERSE | RP1 *indiano … fortuna* | RP 2 *gobierno alfonsino* | RP 3 *desenfreno y dilapidación* | RP 4 *geografía comarcal* | RP 5 *común…trona* |
|---|---|---|---|---|---|
| Translators | 71.4% | 65.7% | 57.1% | 68.6% | 68.6% |
| Teachers | 66.7% | 66,7% | 70.8 % | 62.5% | 75.0 % |

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- **Between groups**: subjects in both groups found difficulty in translating the Rich Points

- **Directionality**: the percentage of Rich Points identified was greater in inverse translation than in direct translation

- The Rich Points identified varied according to each individual

■    No notable difference was found between the way translators and teachers characterised the translation problems they identified

This was because:

(i)    the number of subjects was small

(ii)   subjects' descriptions were often confusing and therefore difficult to classify

■ There was a greater tendency for teachers to describe problems as linguistic, either in terms of re-expression or of comprehension

■ Problems of intentionality: most teachers described them as linguistic whilst most translators assigned them to a wider range of categories (textual, function, intentionality)

# Coefficient of satisfaction for each Rich Point

|  | DIRECT TRANSLATION | | INVERSE TRANSLATION | |
|---|---|---|---|---|
|  | **Translators** | **Teachers** | **Translators** | **Teachers** |
| **RP1** | .78 | .76 | .78 | .79 |
| **RP2** | .76 | .61 | .82 | .74 |
| **RP3** | .89 | .90 | .74 | .70 |
| **RP4** | .83 | .64 | .61 | .85 |
| **RP5** | .89 | .76 | .69 | .76 |

■ Subjects' coefficient of satisfaction is similar for each Rich Point
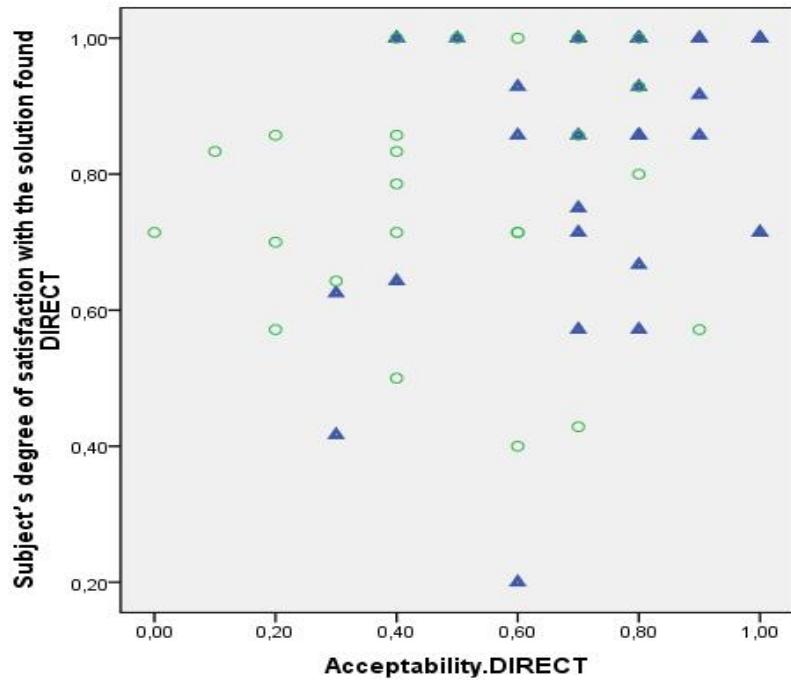
**(direct)**          **(inverse)**
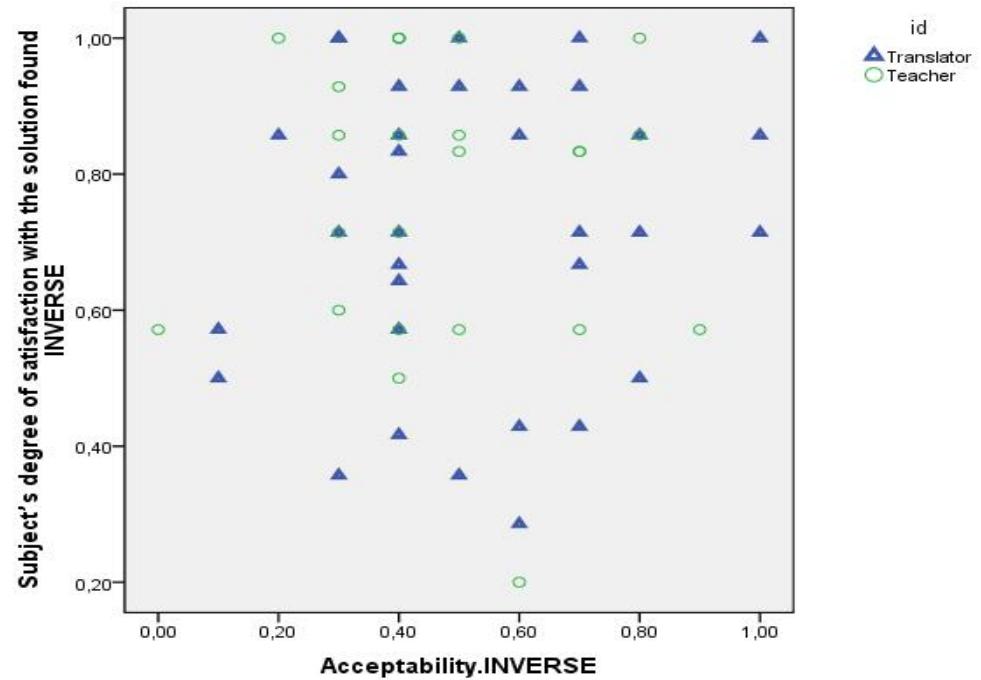


- No relation was found between subjects' satisfaction with their solutions to translation problems and real acceptability

# DECISION-MAKING

**(PACTE 2009)**

*Decisions made during the translation process which involve the use of automatic and non-automatic cognitive resources (internal support) and the use of different documentation resources (external support)*

❑ Instruments:

  ✓ Translations

  ✓ Direct observation

  ✓ Translation protocols (Proxy / Camtasia)

❑ Indicators:

  ✓ Sequences of actions

  ✓ Type of internal support

  ✓ Acceptability
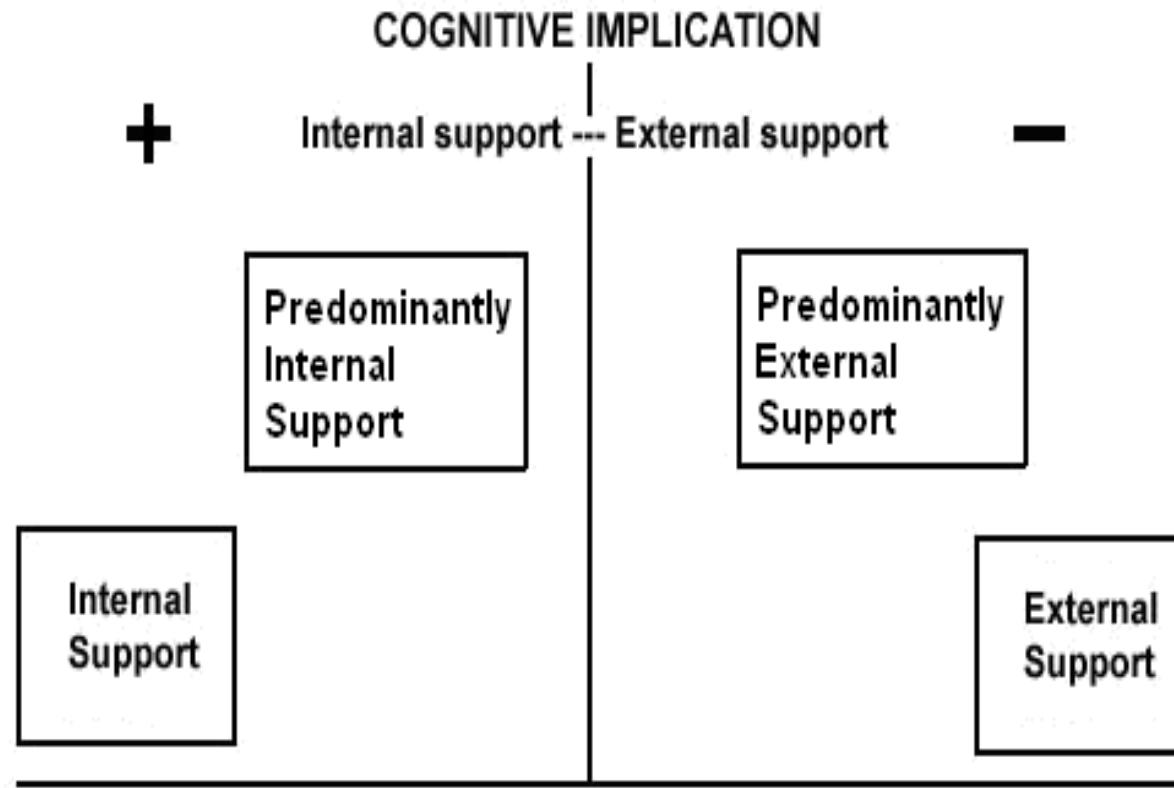
# 1. SEQUENCES OF ACTIONS [direct translation]
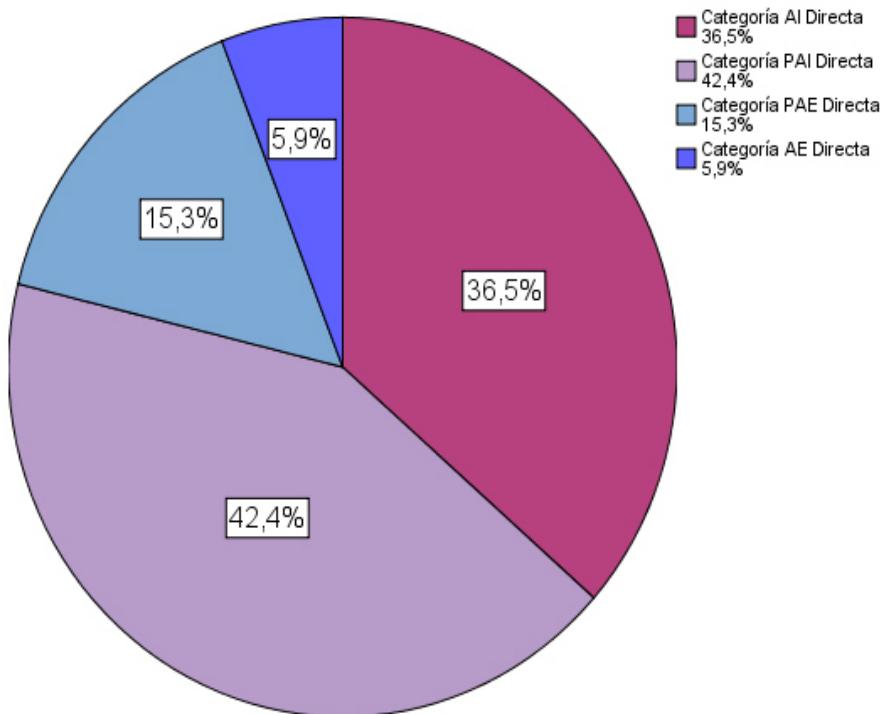


Categoría AI Directa 36,5%
Categoría PAI Directa 42,4%
Categoría PAE Directa 15,3%
Categoría AE Directa 5,9%

Porcentaje de las secuencias de acciones. TRADUCTORES. Traducción directa



Categoría AI Directa 52,5%
Categoría PAI Directa 29,2%
Categoría PAE Directa 11,7%
Categoría AE Directa 6,7%
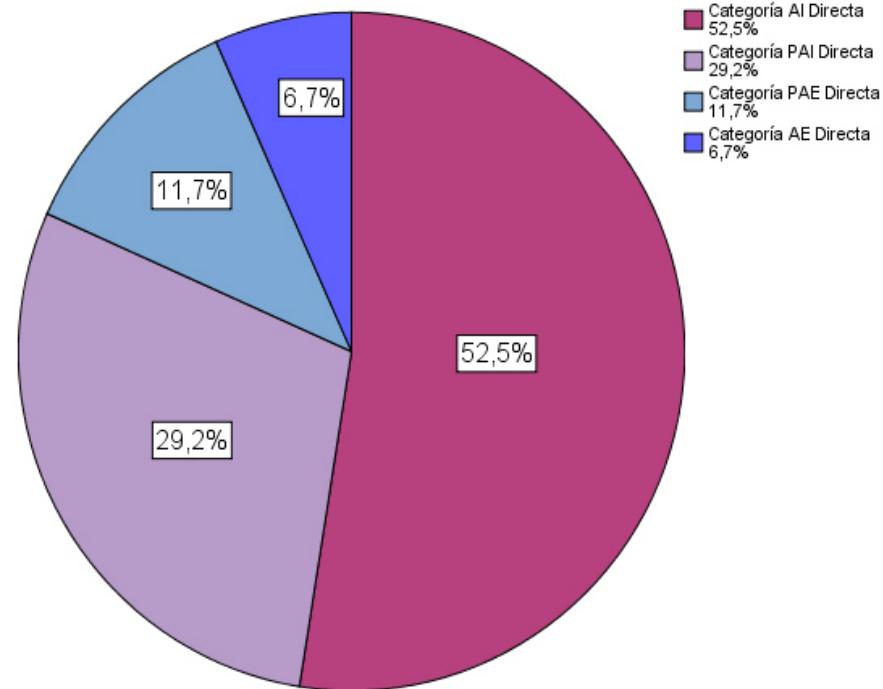
Porcentaje de las secuencias de acciones. PROFESORES. Traducción directa

# 1. SEQUENCES OF ACTIONS [inverse translation]
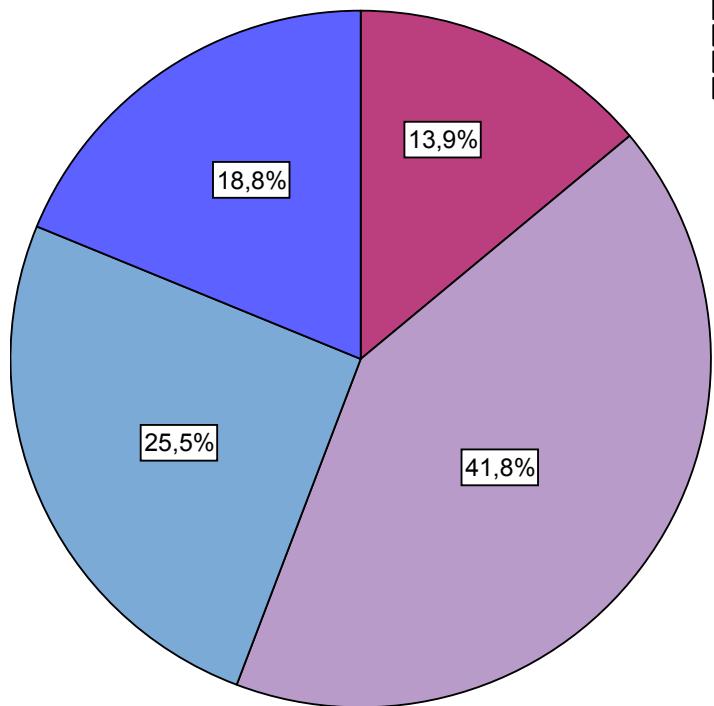
Categoría AI 13,9%
Categoría PAI 41,8%
Categoría PAE 25,5%
Categoría AE 18,8%

13,9%

18,8%

25,5%

41,8%

Porcentaje de las secuencias de acciones. TRADUCTORES. Traducción inversa.

Categoría AI 31,7%
Categoría PAI 31,7%
Categoría PAE 18,3%
Categoría AE 18,3%

18,3%

31,7%

18,3%

31,7%
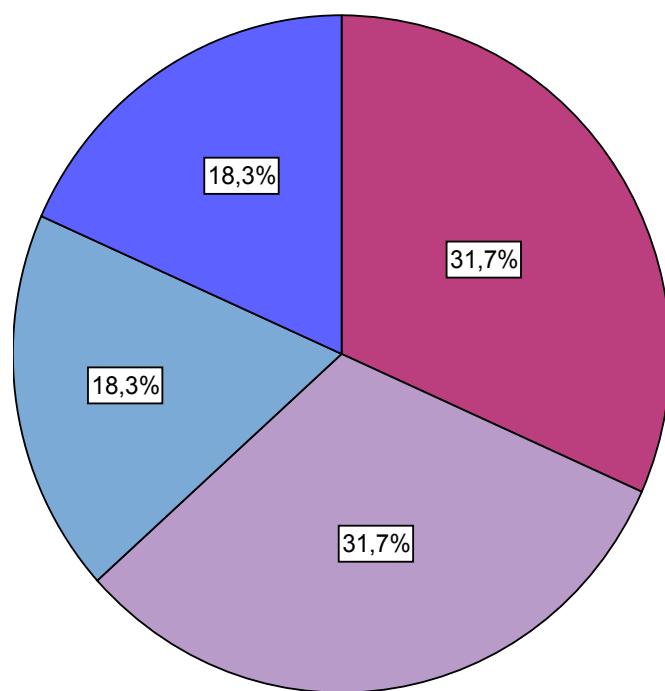
Porcentaje de las secuencias de acciones. PROFESORES. Traducción inversa.

- **Internal Support** is more characteristic of teachers

- **Predominantly Internal Support** is more characteristic of translators

- **Predominantly External Support** is used a little more often in inverse translation than in direct translation by both groups

- **External Support** is used much more often in inverse translation than in direct translation by both groups

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**In general, Predominantly Internal Support leads to more acceptable solutions.**

DIRECT TRANSLATION

In the case of translators, Predominantly Internal Support leads to more acceptable solutions (47.3%).

In the case of teachers, Internal Support leads to more acceptable solutions (63.7%).

INVERSE TRANSLATION

In both groups, Predominantly Internal Support leads to more acceptable solutions (translators 51.9%; teachers 38.6%).

**Internal support: Automatized and Non-automatized**

- Automatized internal support: use of internal support and Rich Point is not identified as a problem

- Non-automatized internal support: use of internal support and Rich Point is identified as a problem (*thinking*).

**Automatized internal support (AIS)**

| DIRECT Automatized | % Automatized | Index of acceptability Automatized | Overall acceptability |
|---|---|---|---|
| Tranlators | 25.0% | 0.66 | 0.73 |
| Teachers | 37.5% | 0.54 | 0.49 |

| INVERSA Automatizado | % Automatized | Index of acceptability Automatized | Overall acceptability |
|---|---|---|---|
| Tranlators | 7.0% | 0.60 | 0.52 |
| Teachers | 12.0% | 0.37 | 0.48 |

- Both groups use more AIS in direct translation
- Teachers used AIS more often than translators (in both direct and inverse translation), with less acceptable results
- Fewer translators used AIS but with more acceptable results than teachers (especially in inverse translation)

**Non-automatized internal support (NAIS):** *thinking*

| DIRECT Not automatized | % (thinking) | Index of acceptability Not automatized | Overall acceptability |
|---|---|---|---|
| Tranlators | 11.0% | 0.89 | 0.73 |
| Teachers | 17.0% | 0.45 | 0.49 |

| INVERSE Not automatized | % (thinking) | Index of acceptability Not automatized | Overall acceptability |
|---|---|---|---|
| Tranlators | 9.0% | 0.50 | 0.52 |
| Teachers | 19.0% | 0.50 | 0.48 |

- Fewer translators than teachers used NAIS
- The index of acceptability of translators in direct translation is particularly high (even exceding overall acceptability)
- The index of acceptability of teachers is much lower than that of translators' in direct translation

CONCLUSION

Translation competence involves the use of both automatized and non-automatized internal support:

- Translators obtain acceptable solutions thanks to their internalisation of acceptable solutions as a result of their experience in translation (AIS) and knowledge of translation (NAIS)

# EFFICACY OF THE TRANSLATION PROCESS

**(PACTE 2008)**
*Relationship between time taken to complete a translation task
and the acceptability of the solution*

# EFFICACY OF THE TRANSLATION PROCESS

❑ Instruments:

- ✓ Translations
- ✓ Direct observation
- ✓ Translation protocols (Proxy / Camtasia)

❑ Indicators:

- ✓ Total time taken
- ✓ Time taken at each stage
- ✓ Acceptability

DIRECT TRANSLATION

INVERSE TRANSLATION

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Translators:
mean percentage of time taken at each stage:Direct translation



- Orientation stage: 8.79%
- Development stage: 52.77%
- Revision stage: 38.44%

Teachers:
mean percentage of time taken at each stage: Direct translation



- Orientation stage: 6.65%
- Development stage: 71.18%
- Revision stage: 22.17%

Translators:
mean percentage of time taken at each stage: Inverse translation



6,38%
26,54%
67,08%

Orientation stage:
6.38%

Development stage:
67.08%

Revision stage:
26.54%

Teachers:
mean percentage of time taken at each stage: Inverse translation



6,83%
20,21%
72,96%

Orientation stage:
5.83%

Development stage:
72.96%

Revision stage:
20.21%

TOTAL TIME TAKEN: no differences between the two groups
- Greater heterogeneity among the group of translators
- Most time taken: translators performing inverse translation

TOTAL TIME TAKEN & ACCEPTABILITY:
- Direct translation: no significant relationship (in either group)
- Inverse translation: significant relationship in translators

TIME TAKEN AT EACH STAGE (orientation, development, revision):
- Development stage is shorter in translators (especially in direct translation)
- Revision stage is longer in translators (especially in direct translation)
→ Characteristics inherent to translators

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# USE OF INSTRUMENTAL RESOURCES

**(Fernández Rodríguez, in progress; PACTE, in progress)**

*Strategies used when consulting documentary resources in electronic format (websites, dictionaries and encyclopaedias on CD-ROM)*

❑ Instruments:

   ✓ Camtasia recordings, Catalogue of searches

❑ Indicators (Rich Points only):

   ✓ Time spent on searches

   ✓ Number of searches

   ✓ Number of resources

   ✓ Variety of searches

   ✓ Acceptability

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Statistically greater amount of time in the case of translators in direct and inverse translation

- Translators: more time in inverse translation
- Teachers: more time in direct translation



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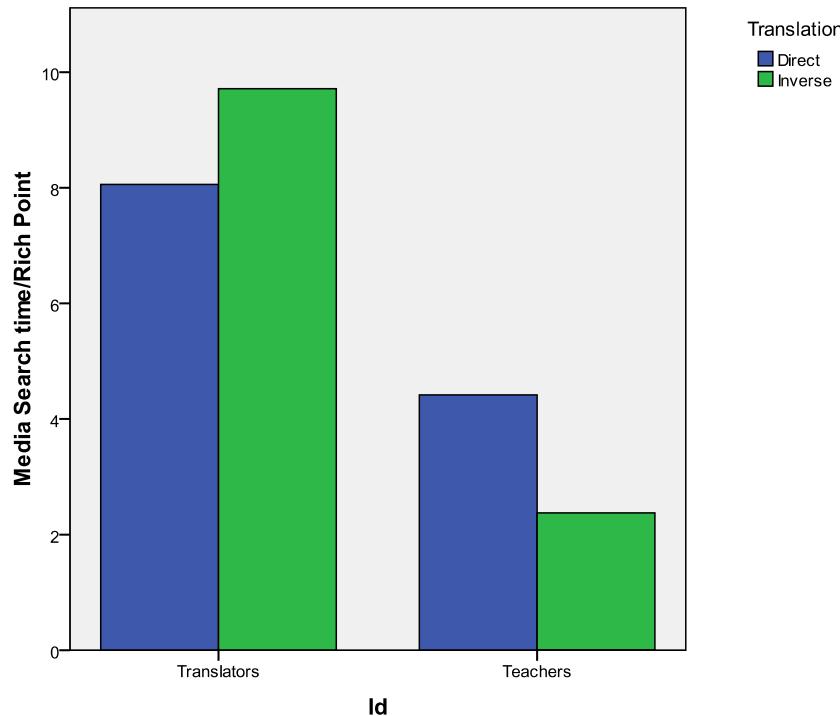
Differences in the development and revision stages: more time in the case of translators

- Direct translation: more in revision
- Inverse translation: more in development
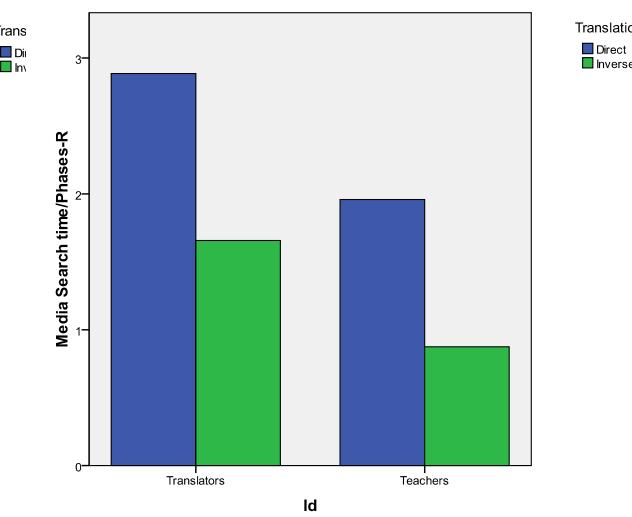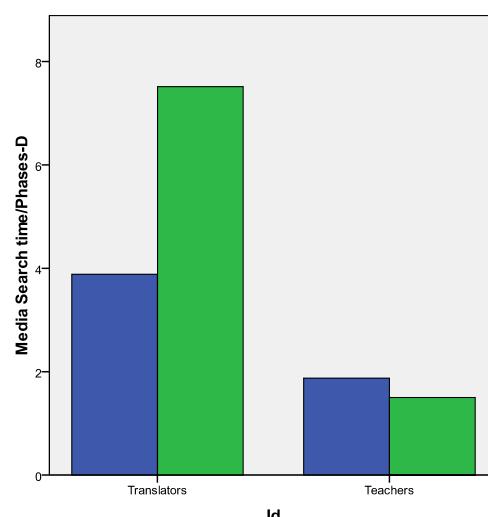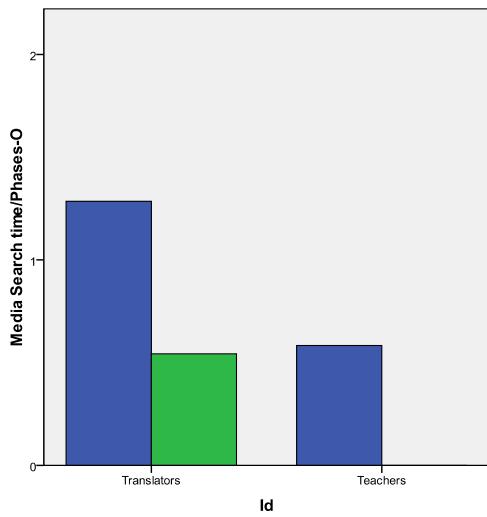
DIVISION INTO THREE GROUPS:  **A:** 0 - 0.3          **B:** 0.31 - 0.7          **C:** 0.71 - 1

Differences (translators: more time)
- Direct translation: group B
- Inverse translation: groups A and B

No differences over 0.7 in terms of acceptability

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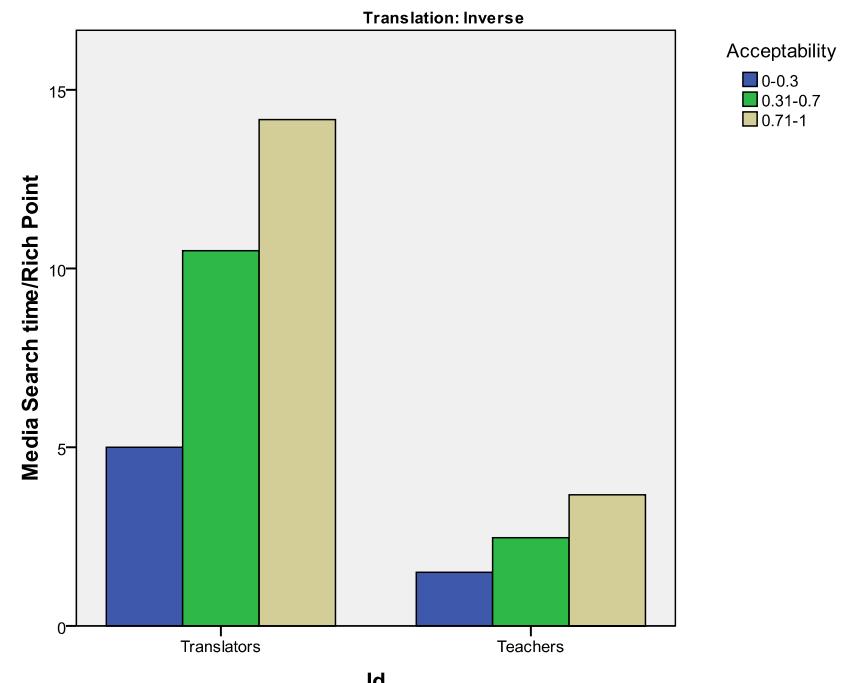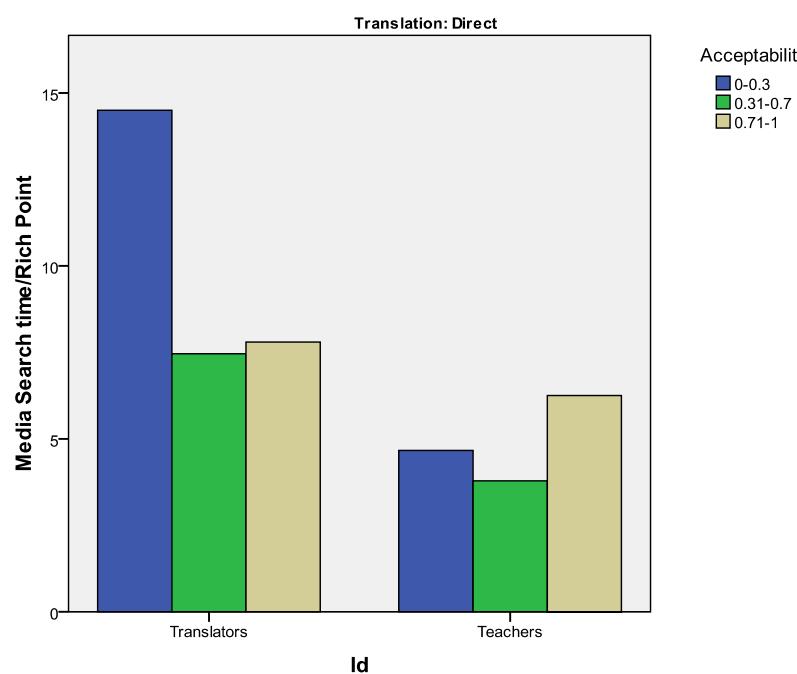
Translators perform more searches in direct and inverse translation

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DIVISION INTO THREE GROUPS: **A:** 0 - 0.3          **B:** 0.31 - 0.7          **C:** 0.71 - 1

Differences (translators: more searches)
- Direct translation: group B
- Inverse translation: all groups

**Translation: Direct**

Acceptability
- Acceptability [0,0.3]
- Acceptability [0.31,0.7]
- Acceptability [0.71,1]

Mean Total Queries

Translator / Teacher

**Translation: Inverse**

Acceptability
- Acceptability [0,0.3]
- Acceptability [0.31,0.7]
- Acceptability [0.71,1]

Mean Total Queries

Translator / Teacher

63

**PACTE**
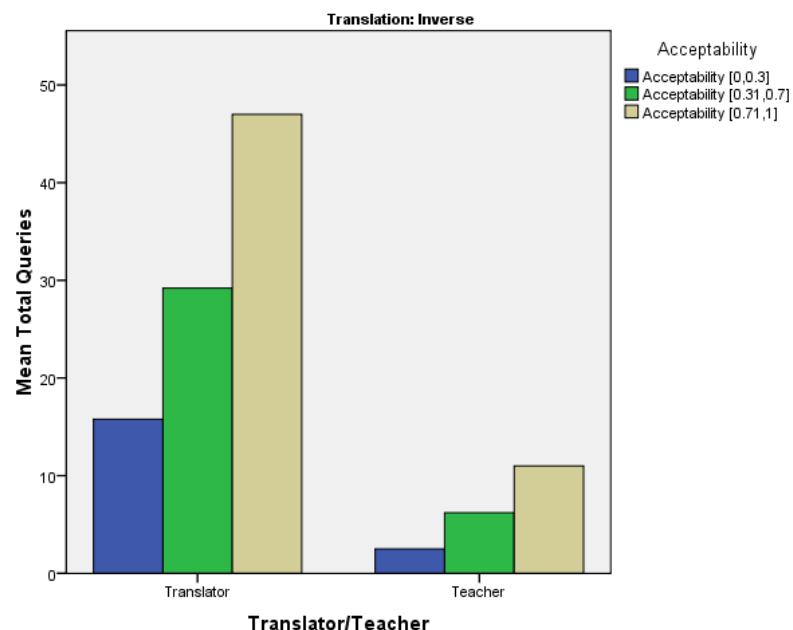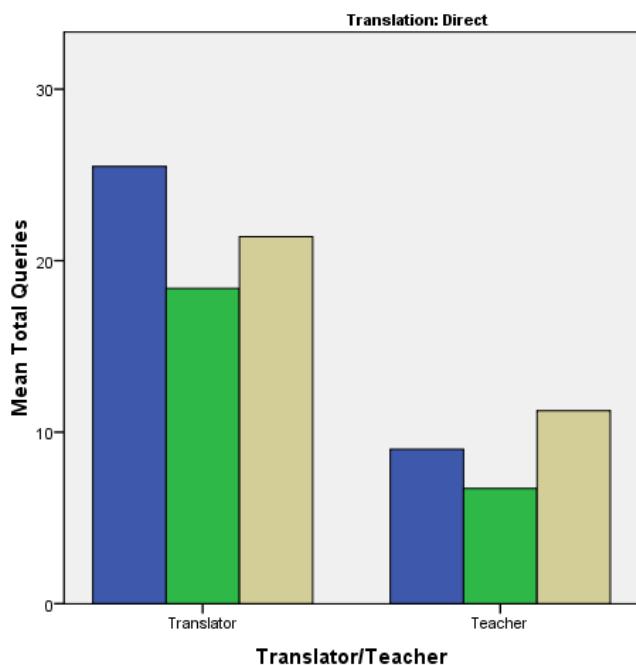
Translators use more resources in direct and inverse translation
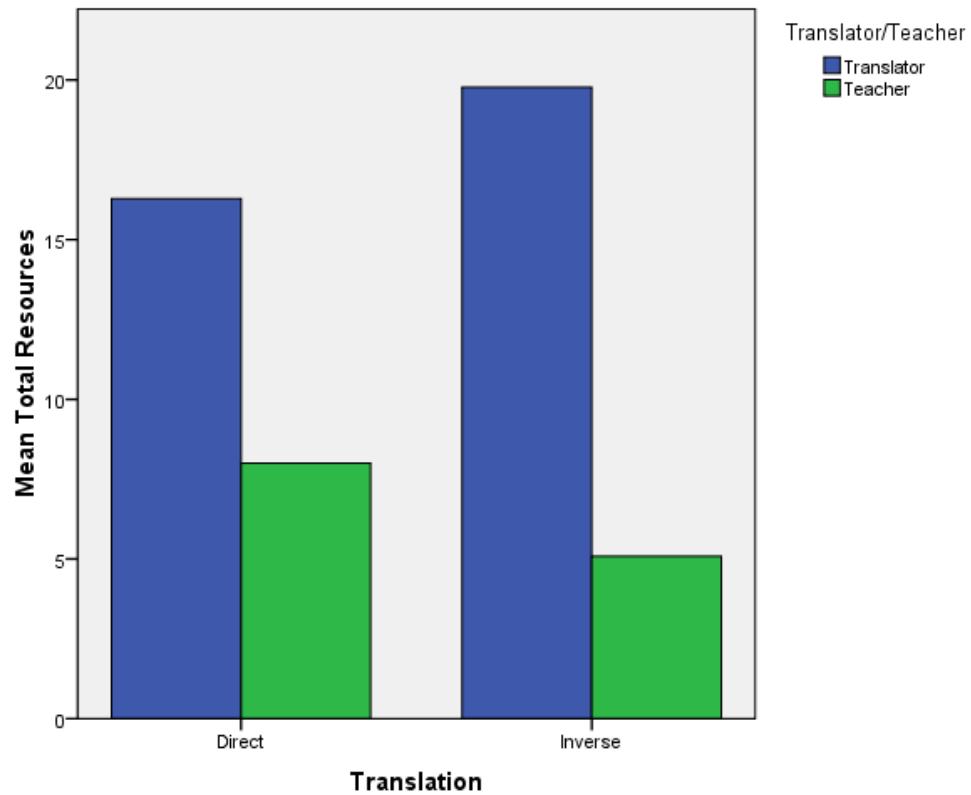
DIVISION INTO THREE GROUPS: **A:** 0 - 0.3          **B:** 0.31 - 0.7          **C:** 0.71 - 1

Differences (translators: more resources)
- Direct translation: groups A and B
- Inverse translation: groups A and B

**PACTE**
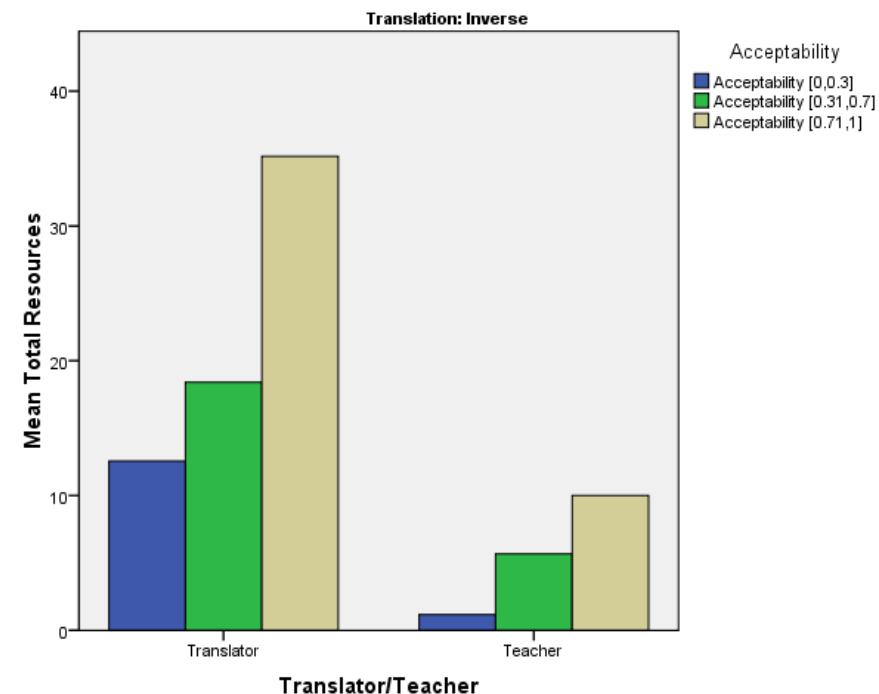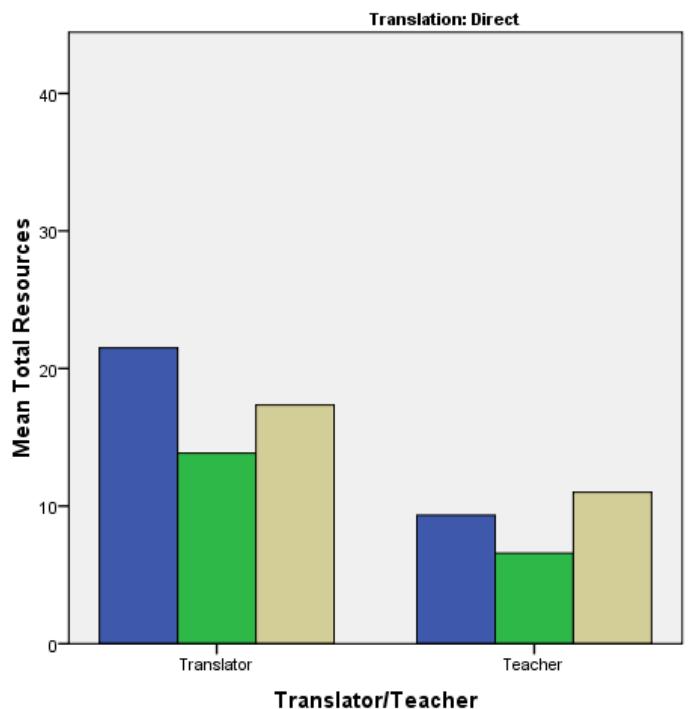
# Catalogue

- Search in a search engine.
- Bilingual/equivalent-oriented search.
- Monolingual/definition-oriented search.
- Exact search (using inverted commas).
- Search for a synonym/antonym.
- Search in an electronic corpus.
- Search in an encyclopedia.
- Search within results.
- Cache search.
- Search within specified domain.
- Search in specified language.
- Search between specified dates.
- Search with correction (Did you mean:).

Translators perform a greater variety of searches
in direct and inverse translation
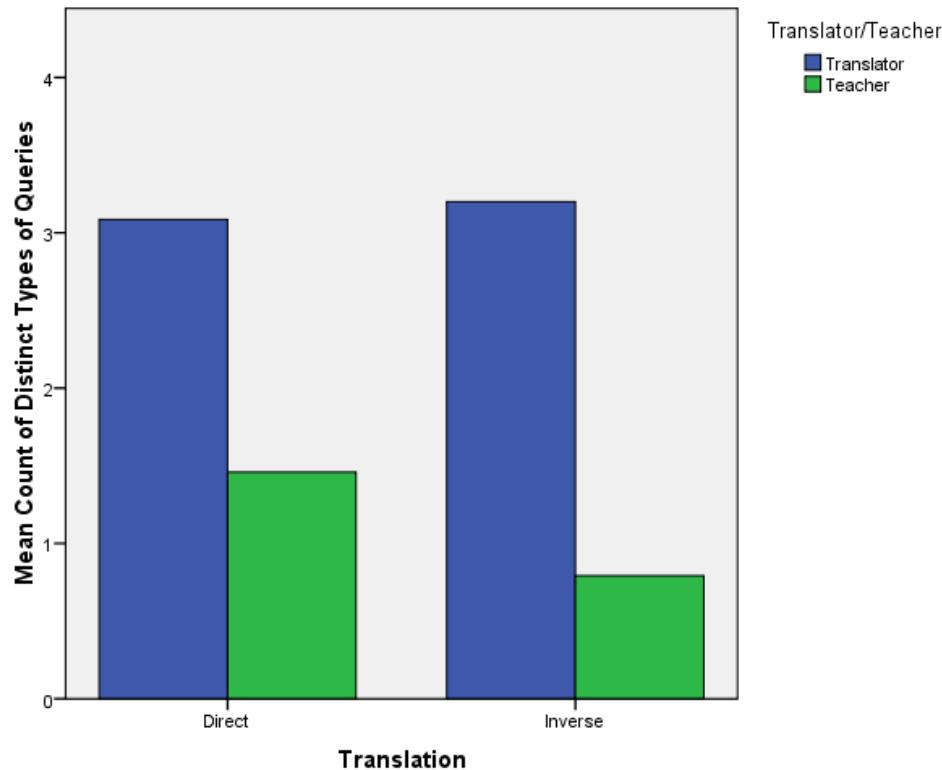
**PACTE**

DIVISION INTO THREE GROUPS: **A:** 0 - 0.3          **B:** 0.31 - 0.7          **C:** 0.71 - 1

Differences (translators: greater variety)
- Direct translation: groups A and B
- Inverse translation: groups A and B
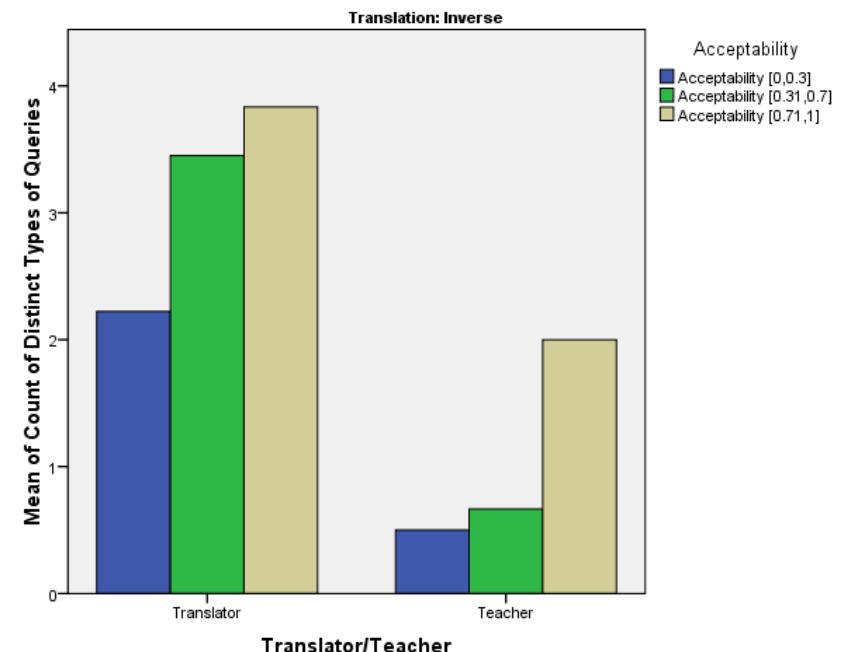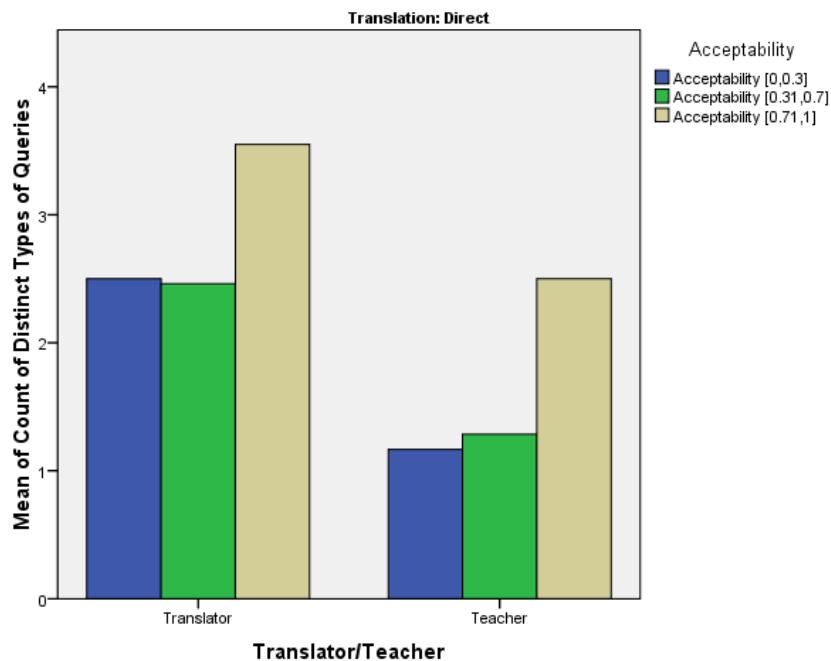
# Categories

**None (N):** no search of any kind is performed.

**Simple (S):** only one type of search is performed.

**Double (D):** 2 types of search are performed.

**Combined (C):** between 3 and 5 types of search are performed.

**Multiple (M):** more than 5 types of search are performed.

## Examples

**Simple:** bus | eq | def | etc. → 14

**Double:** bus+def | bus+eq | bus+exa | etc.

**Combined:** bus+exa+eq | bus+geo+corpus+ctrlf

**Multiple:** combinations of more than 5 types.

CATEGORIES: None, Simple, Double, Combined, Multiple

Translators mainly use double and combined searches and teachers mainly use simple searches.

**Direct**
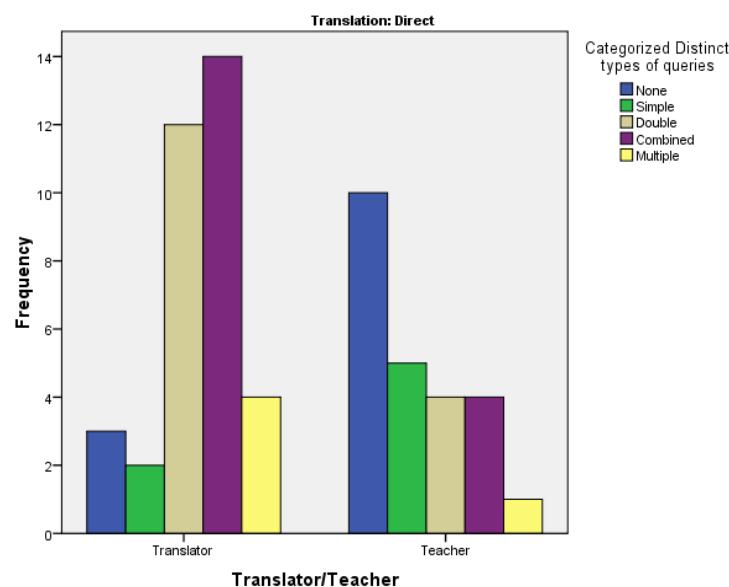
**Inverse**
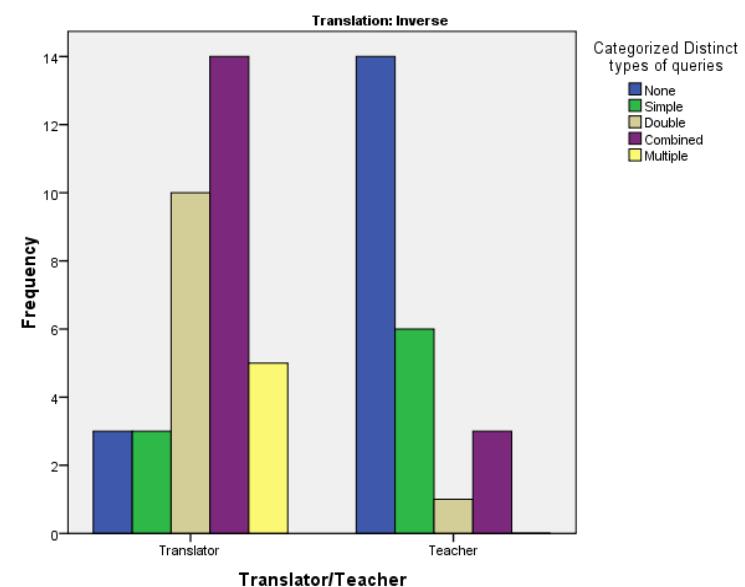
**PACTE**

# 'TOP 9 TRANSLATORS'

**(PACTE, in progress)**

**PACTE**

1. To observe and describe the translation process in the professional translators with the highest acceptability scores (0.9 - 1)

2. To verify the characteristics identified in the comparison between translators and teachers

→ Sub-group comprising the top 9 translators (in terms of acceptability in direct translation) observed

→ Sub-group compared to full translator group (35)

● Why acceptability as the selection criterion?

Transversal indicator: it does not correspond to just one variable and is not specific to a given sub-competence

● Why direct translation?
- Significant differences between translators and teachers
- Highest levels of acceptability

● Why the top 9 translators?
- There are no NA, just A and SA
- 1st quartile (25%) of sample group
- Homogeneous scores: 0.9 - 1

Selected indicators only: those that have produced noteworthy data in comparison between translators and teachers

→ Compared to full translator group (35)

The data obtained corroborate and even accentuate the results of the comparison between translators and teachers

**PACTE**

ACCEPTABILITY ⬆

- Mean for all translators (35): 0.73

- Mean for top 9: 0.96

# EXAMPLES

DYNAMIC INDEX (KNOWLEDGE ABOUT TRANSLATION) ↑

- All translators (35): 0.27
- Top 9: 0.36

DYNAMIC INDEX OF OVERALL TRANSLATION PROJECT (TP) ↑

- All translators (35): 0.71
- Top 9: 0.89

DYNAMIC INDEX OF TP OF EACH RICH POINT ↑

- All translators (35): 0.57
- Top 9: 0.89

DYNAMIC TRANSLATION INDEX (KT + TP) ↑

- All translators (35): 1.56
- Top 9: 2.13

COHERENCE COEFFICIENT (KT) ↑

- All translators (35): 0.37
- Top 9: 0.50

**IDENTIFICATION OF PROTOTYPICAL TRANSLATION PROBLEMS =**

- All translators (35): 46.3% of RPs identified as a problem; 53.6% of RPs not identified as a problem
- Top 9: 40% of RPs identified as problematic; 60% of RPs not identified as a problem

**CHARACTERISATION OF PROTOTYPICAL TRANSLATION PROBLEMS =**

- No evidence of any change

**SEQUENCES OF ACTIONS**

Same sequence distribution pattern: + PIS, IS, PES, - ES **=**

Prevalence of PIS (Predominantly Internal Support) ↑

- All translators (35): 42.4%
- Top 9: 51.1%

ANALYSIS OF THE TOP 9 TRANSLATORS CONFIRMS THE CHARACTERISTICS OF TRANSLATION COMPETENCE IDENTIFIED IN THE EXPERIMENT

# II.- ANALYSIS OF THE TRANSLATION COMPETENCE CORPUS RESULTING FROM THE EXPERIMENT

**(Rodríguez-Inés, 2011; PACTE, in progress)**

**PACTE**

- PRODUCT

    – Differences between groups?

    – Similarities among translations?

PACTE

- 4 Source Texts: 1 SP; 1 EN; 1 FR; 1 GE (approx. 150 words each)

**= 113 Translations**

|  | Translations |
|---|---|
| Translators | 68 |
| Teachers | 45 |

|  | Translations |
|---|---|
| Direct    (EN/FR/GE > SP) | 54 |
| Inverse   (SP > EN/FR/GE) | 59 |

- Words liable to be translated as calques
- Words liable to be translated as loan words
- Translator's notes
- Inverted commas
- Brackets
- Type/token ratio
- Sentence length
- Similarity
- Odd frequencies

**P▲CTE**

- WORDS LIABLE TO BE TRANSLATED AS CALQUES

| "Trojan Horse" | troyano | caballo de Troya / caballo troyano |
|---|---|---|
| **Translators** | **57.1 %** | 35.7 % |
| **Teachers** | 12.5 % (1) | **75 %** |

**Google**

"troyano" site:www.pandasecurity.com/spain → 29,700 results

"caballo de troya" site:www.pandasecurity.com/spain → 40

"caballo troyano" site:www.pandasecurity.com/spain → 0

**PACTE**

| TEACHERS |
|---|
| GE direct (within the 6 files) |
| **1**: 0.66; **2**: 0.35; **3**: 0.15; **4**: 0.09 |
| GE inverse (within the 7 files) |
| 1: 0.54; 2: 0.23; 3: 0.10; 4: 0.05 |
| EN direct (within the 8 files) |
| 1: 0.73; 2: 0.44; 3: 0.22; 4: 0.14 |
| EN inverse (within the 9 files) |
| 1: 0.56; 2: 0.36; 3: 0.17; 4: 0.10 |
| FR direct (within the 7 files) |
| 1: 0.74; 2: 0.57; 3: 0.37; 4: 0.28 |
| FR inverse (within the 8 files) |
| 1: 0.63; 2: 0.41; 3: 0.27; 4: 0.17 |

| TRANSLATORS |
|---|
| GE direct (within the 9 files) |
| 1: 0.72; 2: 0.42; 3: 0.20; 4: 0.12 |
| GE inverse (within the 9 files) |
| 1: 0.52; 2: 0.24; 3: 0.11; 4: 0.05 |
| EN direct (within the 14 files) |
| 1: 0.74; 2: 0.48; 3: 0.25; 4: 0.16 |
| EN inverse (within the 15 files) |
| 1: 0.57; 2: 0.36; 3: 0.15; 4: 0.08 |
| FR direct (within the 10 files) |
| 1: 0.70; 2: 0.48; 3: 0.26; 4: 0.18 |
| FR inverse (within the 11 files) |
| 1: 0.66; 2: 0.40; 3: 0.25; 4: 0.15 |

PACTE

| TEACHERS | TRANSLATORS |
|---|---|
| GE direct (within the 6 files) | GE direct (within the 9 files) |
| 1: **0.66**; 2: **0.35**; 3: **0.15**; 4: **0.09** | 1: 0.72; 2: 0.42; 3: 0.20; 4: 0.12 |
| GE inverse (within the 7 files) | GE inverse (within the 9 files) |
| 1: 0.54; 2: 0.23; 3: 0.10; 4: 0.05 | 1: 0.52; 2: 0.24; 3: 0.11; 4: 0.05 |
| EN direct (within the 8 files) | EN direct (within the 14 files) |
| 1: 0.73; 2: 0.44; 3: 0.22; 4: 0.14 | 1: 0.74; 2: 0.48; 3: 0.25; 4: 0.16 |
| EN inverse (within the 9 files) | EN inverse (within the 15 files) |
| 1: 0.56; 2: 0.36; 3: 0.17; 4: 0.10 | 1: 0.57; 2: 0.36; 3: 0.15; 4: 0.08 |
| FR direct (within the 7 files) | FR direct (within the 10 files) |
| 1: 0.74; 2: 0.57; 3: 0.37; 4: 0.28 | 1: 0.70; 2: 0.48; 3: 0.26; 4: 0.18 |
| FR inverse (within the 8 files) | FR inverse (within the 11 files) |
| 1: 0.63; 2: 0.41; 3: 0.27; 4: 0.17 | 1: 0.66; 2: 0.40; 3: 0.25; 4: 0.15 |

**TEACHERS**

GE direct (wi...

1: 0.66; 2:

GE inverse

1: 0.54; 2:

EN direct (

1: 0.73; 2:

EN inverse (

1: 0.56; 2: 0.36; 3: 0.17; 4:

**FR direct (within the 7 files)**

**1: 0.74; 2: 0.57; 3: 0.37; 4: 0.28**

**FR inverse (within the 8 files)**

**1: 0.63; 2: 0.41; 3: 0.27; 4: 0.17**

**TRANSLATORS**

GE direct (within the 9 files)

1: 0.72; 2: 0.42; 3: 0.20; 4: 0.12

GE inverse (within the 9 files)

0.05

es)

0.16

iles)

0.08

...ct (with...e 10 files)

...0.70; 2: 0.4...; 3: 0.26; 4: 0.18

**FR inverse (within the 11 files)**

**1: 0.66; 2: 0.40; 3: 0.25; 4: 0.15**

> **Specifically, the highest degree of similarity was found among teachers' translations from French into Spanish**

> **In general, the highest degree of similarity was found among translations from and into French**

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- ## Proximity of French and Spanish
  - – Subjects adhere to ST
  - – Subjects do not fully explore the possibilities of the TL

  → therefore smaller range of possible translations

# SIMILARITY AMONG TRANSLATIONS
## (Translators + Teachers)

| TEACHERS | | TRANSLATORS |
|---|---|---|
| GE direct | 1: 0.69; 2: 0.38; 3: 0.18; 4: 0.10 | GE direct |
| **GE inverse** | **1: 0.52; 2: 0.23; 3: 0.10; 4: 0.05** | **GE inverse** |
| EN direct | 1: 0.73; 2: 0.46; 3: 0.23; 4: 0.15 | EN direct |
| **EN inverse** | **1: 0.57; 2: 0.36; 3: 0.15: 4: 0.09** | **EN inverse** |
| FR direct | 1: 0.69; 2: 0.50; 3: 0.29; 4: 0.20 | FR direct |
| **FR inverse** | **1: 0.64; 2: 0.40; 3: 0.25; 4: 0.16** | **FR inverse** |
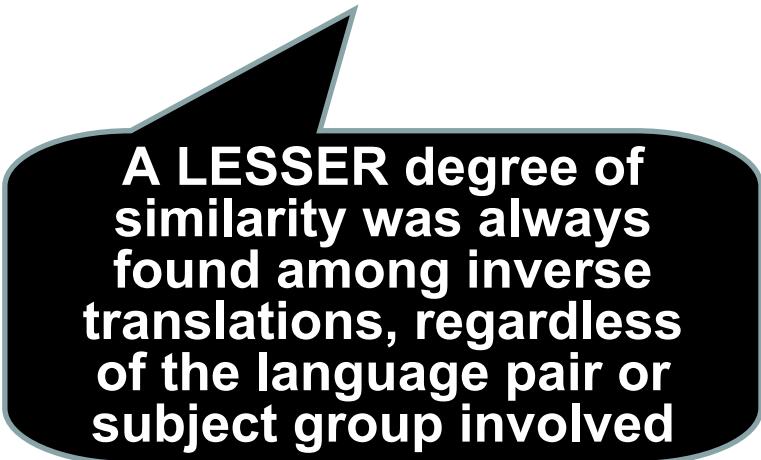
**A LESSER degree of similarity was always found among inverse translations, regardless of the language pair or subject group involved**

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- Individual levels of linguistic competence
  - Expression within one's limits
- Acceptability: much lower in inverse translation than in direct translation
  - Range of 'correct' + 'incorrect' possible equivalents

- ## Differences in the way translators translate
  - ### Some tendencies
    - YES: calques; brackets; odd frequencies
    - NO: loan words; translator's notes; type/token ratio; sentence length
- ## Similarity among translations
  - ### FR<>SP translations: most similar
  - ### FR>SP teachers' translations: highest degree of similarity
  - ### Inverse translations: lesser degree of similarity

**PACTE**

# III.- CONCLUSIONS

**PACTE**

Observations made:

- Differences in the translations carried out:

  – Translators produce higher quality translations

  – Tendencies in the use of certain linguistic elements

  – Degree of similarity among translations

# **CONCLUSIONS**

Observations made:

- TC can be acquired through experience

- Relevance of the strategic, instrumental and knowledge about translation sub-competences

- Interrelation between sub-competences and relevance of strategic sub-competence: translators combine cognitive and external resources in an efficient manner

- Relevance of instrumental sub-competence: translators spend more time on searches, perform more, more varied and more complex searches and use more and more varied resources

- Relevance of the dynamic concept of and approach to translation

Observations made:

- Lesser degree of automatization than in other kinds of procedural expert knowledge : ↔ use of instrumental and knowledge about translation sub-competences

- Presence of subjectivity: ↔ psychophysiological components

- Differences between direct and inverse translation

**PACTE**

Distinguishing features of TC:

- To solve translation problems with acceptable solutions *STRATEGIC*

- To have a dynamic and coherent concept of translation (declarative

    knowledge) *KNOWLEDGE ABOUT TRANSLATION*

- To have a dynamic approach to translation (procedural knowledge)

    *STRATEGIC*

- To combine cognitive resources (internal) and documentary resources

    (external) in an efficient manner *STRATEGIC + INSTRUMENTAL*

- To use automatized  (due to experience) and non-automatized cognitive

    resources in an efficient manner *STRATEGIC + KNOWLEDGE ABOUT*

    *TRANSLATION*

- To use instrumental resources in an efficient manner *INSTRUMENTAL*

**PACTE**

*Gracias…      Thank you…     Merci…*

*Obrigado…      Danke…         Tack…               Tak…*

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