A SURVEY OF INTERPRETERS' NEEDS AND PRACTICES RELATED TO LANGUAGE TECHNOLOGY

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ABSTRACT

Thanks to the wide range of language technologies at the disposition of translators, professionals have been able to benefit from these tools in order to make the job easier and achieve better results.

With the intention of better ascertaining language technologies used by interpreters, we have created and launched a survey out to professional interpreters in order to learn which tools they use and their opinion as to whether or not they satisfy the needs of the profession.

The ultimate goal of this survey is to analyse results in order to design and implement language tools for interpreters which are specifically tailored to their needs.

KEYWORDS

Language technologies, survey, interpreting, professional interpreters.

INTRODUCTION

Niche

This project has been carried out within the framework of projects INTELITERM (ref. no. FFI2012-38881, MINECO)¹ and partially EXPERT (ref. 317471-FP7-PEOPLE-2012-ITN, European Commission)². The first, whose main researcher is Professor Gloria Corpas, also this project's supervisor, is funded by the Spanish Ministry of Economy and Competitiveness (MINECO) as a project focused on translation technology. Its title is INTELITERM acronym for Intelligent Terminologhy Management System for Translators; and its duration period started in December 2012 and ends in June 2016.

The second, entitled *Exploiting Empirical Approaches to Translation* is funded by the Marie Curie Initial Training Networks (ITN) and the European Commission. Its consortium is formed by the coordinating University of Wolverhampton (Great Britain), Pangeanic (Spain), the University of Malaga, the University of Sheffield (Department of Computer Science), the University of Saarland (Germany), Translated (Italy), Dublin City University Centre for Next Generation Localisation (Ireland), School of Computing, Worfast, Universiteit van Amsterdamn (Netherlands), and two Spanish translation companies – Celer and Hermes. This second project's duration started on the 1st October 2012 and ends on the 30th September 2016.

This present study aims to better ascertain interpreters' needs and, therefore, constitutes a pioneering approach to the profession, fitting in with research lines of the first project aforementioned due to its focus on teaching innovation, TIC and corpora.

The present research also adjusts to this second project we have listed and is included in its framework in as much as it constitutes an empirical approach to the world of translation – translation used loosely as a term to denote the transformation of a text in one language into another – as this survey is focused solely on interpreting.

There are very few works on the world of interpreting and our aim is to learn which language tools are employed by the professionals in order to ascertain if they are

¹ Please visit http://www.lexytrad.es

² Please visit http://expert-itn.eu/ for more information.

satisfactory and, if not, future research could focus on the requirements in the profession and improve the outcome.

We offer a pioneering approach to the profession carried out by interpreters every day in every part of the world. "Unlike translators, for whom a myriad of assistedcomputer tools are available, interpreters have not benefited from the same level of automation or innovation." (Costa, Corpas and Durán, 2014: 27).

To this day interpreters are unable to count on technology tools that could facilitate their job and have a great impact on the result.

Furthermore, they do not have the time to provide the answer in the same way as translators due to the immediate requirement of the statement translated into another language. As Pöchhacker (2011: 10) states: "Within the conceptual structure of Translation, interpreting can be distinguished from other types of translational activity most succinctly by its immediacy."

At the moment interpreters can only count on the previous documentation phase, where the professional is able to gather information on the matter beforehand.

This project rests on a case study to ascertain information about what professional interpreters use in their profession regarding tools and, therefore, what are their needs and how we could, in the near future, improve these tools to satisfy these needs.

Most interpreters only use a pen and paper to write down the main ideas and keywords to help them later reproduce the information (during longer speeches, chiefly consecutive or liaison interpreting) and in a booth, normally with a partner, when carried out in the simultaneous mode.

There are a number of tools which could have a high professional impact, these being audio input tools, corpora, multiple web-based resources, note-taking applications, voice recorders, etc. We will describe these tools later on.³

Nevertheless, it would seem that these technologies are only used in the translation domain. A vast number of technology tools can serve the translator to accomplish his/her work (dictionaries, thesauri, Translator's Workbench...). In contrast, the interpreter can only rely on the previous search for relevant information beforehand (presuming the professional is provided with the topic prior to the event), and their real life experiences and knowledge.

³ For more information, please see Costa, Corpas and Durán (2014).

Hypothesis and objectives

Our hypothesis is that whilst translators have a vast number of technology tools they can rely on, interpreters do not benefit from these tools at the same level, albeit because they are unknown or they do not completely satisfy their needs. Thus technology tools for interpreters, either prior to or during the interpretation, do not completely satisfy an interpreter's needs and we believe there is room for improvement.

In order to sustain our hypothesis we have created and launched a survey via Lime Survey out to both organisations and individuals who share this profession so as to ascertain the tools they use and their opinion as to whether or not they believe that there is room for improvement. This survey we have prepared is only addressed to professional interpreters and is divided into three sections: personal information, professional information and information regarding the use of technology.

In general, we believe there is a lack of technology resources for interpreters and the ones that do exist are not common place or do not fully meet their professional needs.

The main purpose of this project is, by means of a survey, to shed some light on the lack of requirements in the profession. We believe that interpreters, albeit due to the lack of knowledge of their existence, or due to the fact that the current tools are unsatisfactory, do not profit from language tools at the same level as translators.

Research plan

We have divided the project into two chapters, preceded by an introduction and succeeded by the conclusions, bibliography and appendices. Each chapter also begins with a brief introduction.

The first chapter is entitled *A Case Study on Technology Tools Used by Interpreters*, in which we will describe the process we have followed to create and launch the survey, including the works we have based ourselves upon, the server we have used and the distribution. This section concludes with the responses we have received.

In the second chapter, entitled *Results Analysis*, we present the data analysis of our survey, taking into account the different modes of interpreting our respondents specialise in.

We end the project with a section of conclusions, in which we will summarize the main ideas and results extracted from the survey, as well a section of references and various appendices.

CHAPTER 1: A CASE STUDY ON TECHNOLOGY TOOLS USED BY INTERPRETERS

Introduction

In order to prove or disprove our hypothesis we have created and launched a survey to both organisations and individuals who share this profession so as to ascertain the tools they use and their opinion as to whether or not they believe that there is room for improvement. The survey we have prepared is only addressed to professional interpreters and is divided into three sections: personal information, professional information and information regarding the use of technology.

As stated before, the present final year project is included within the framework of research projects INTELITERM (ref. FFI2012-38881) and EXPERT (ref. 317471-FP7-PEOPLE-2012-ITN). It constitutes an additional study to the paper by Costa, Corpas and Durán (2014: 27).

Concept and modes of interpreting

For the purpose of the survey, it was necessary to classify the different types of interpreting that are currently in practice, as the objective is to sort the results depending on the types of interpreting the respondents practice.

The main organizations and institutions in this context maintain their own classification according to the types of interpreting they specialise in.

In the case of the SCIC – or DG Interpretation (The European Commission's interpreting service and conference organiser), the profession is classified in nine different types (SCIC, 2014):⁴

- 1. Consecutive: Interpreting after the speaker has finished.
- 2. Simultaneous: Interpreting while the delegate is speaking.
- 3. Relay: Interpreting between two languages via a third.
- 4. Retour: Working from your mother tongue into a foreign language.

⁴ Information extracted from: Directorate General for Interpretation, 2014, *What is conference interpreting*? Accessed 21st May 2014, from http://ec.europa.eu/dgs/scic/what-is-conference-interpreting/index_en.htm

- 5. Pivot: Using a single language as a relay.
- 6. Cheval: An interpreter working alternatively in two booths in the same meeting.
- 7. Asymmetric: All delegates listen to interpretation into only a few languages.
- 8. Whispering: Whispered simultaneous interpreting
- 9. Sign language: Simultaneous interpreting into sign language.

The SCIC defines Conference Interpreting in the following way (SCIC, 2014):

Conference interpreting deals exclusively with oral communication: rendering a message from one language into another, naturally and fluently, adopting the delivery, tone and convictions of the speaker and speaking in the first person.

If we take into account the guidelines for Conference Interpreting written up by the AIIC (International Association of Conference Interpreters), we will be looking at two essential types: simultaneous and consecutive.⁵

According to the ITI (Institute of Translation and Interpreting), however, we can distinguish between five $modes^{6}$ (ITI, 2014):

1. Conference: Simultaneous interpreting at international conferences and formal meetings, with interpreters working in pairs in booths.

2. Business: Interpreting at smaller or less formal company meetings, factory visits, exhibitions, product launches, at government meetings and accompanying delegations etc., which mainly involve consecutive or whispered interpreting.

3. Police and court: Interpreting for the police and courts, the probation service, solicitors, at arbitrations and tribunals etc., which mainly assist consecutive or whispered interpreting.

4. Community: Interpreting for individuals and organisations such as the NHS and social services in matters of health and welfare, as well as for the local government, not-for-profit organisations and at community events, which mainly involve consecutive or whispered interpreting.

5. Telephone: Interpreting over the telephone, where one or more speakers are not in the same room as the interpreter and communicate with him or her through a telephone line.

As can be seen, for this particular case study, the listings approved by the SCIC and the AIIC are vague, due to the fact that they base their classification merely on Conference Interpreting.

⁵ For more information please visit www.AIIC.net

⁶ Information extracted from: Institute of Translation and Interpreting, 2014, *Interpreter search*, Accessed 21st May 2014, from http://www.iti.org.uk

Therefore, it was decided that the survey should be divided into four separate classifications: modes – the different possible manners of interpreting; use of equipment – because our purpose is to study the technology tools used (and, if not, the tools required or in need of improvement); context – because the tools are dependent vastly on the context; and, finally, field of expertise – thus enabling us to extract the variable factors or statistics for each different field.

In order to provide all the information needed on the types on interpreting for this survey and, therefore this project, we follow Pöchhacker (2011: 13-16). The author defines six types of language modalities:

- 1. Simultaneous interpreting: As the source language text is being presented.
- 2. Consecutive interpreting: After the source language utterance.
- 3. Whispered interpreting/Chuchotage: The interpreter works alongside one or a couple of listeners and provides a rendition by speaking in a low voice.
- 4. Sight interpreting: The interpreter's target text production is simultaneous not with the delivery of the source text but with the interpreter's real time (visual) reception of the written source text.
- 5. Liaison interpreting: The interpreter works "back and forth" between the two languages involved, depending on the turn taking of the primary parties. This type may equally occur in conference-type interaction, where interpreters may work in a "bilingual booth", or are said to provide "small retour" (i.e. interpret questions and comment back into the language chiefly used on the floor).
- 6. Sign language interpreting: These type of interpreters work in the short consecutive or, typically, the simultaneous mode.

Pöchhacker (2011: 19) also states:

It should be pointed out in this context, however, that the distinction between consecutive and simultaneous interpreting is not necessarily clear cut. Since neither voice-over interpreting nor signing cause interference in the acoustic channel, sign language interpreters are free to start their output before the end of the source-language message.

In addition to the contexts defined by Pöchhacker, we also included over-the-phone interpreting because nowadays it is becoming more and more popular and most interpreting companies offer this possibility. As Diriker (2010: 329) states:

The ever increasing number of languages that need to be covered in the meetings of international organizations such as the UN and the EU have placed remote interpreting on the agenda.

This means that the interpreter is not in the same room as the conference delegates, the same way as over-the-phone interpreters. Remote interpreting can include the usage of videophones, web cameras or computer screens.

Regarding the use of technology, our decision was to classify the technical equipment that might be used by the individuals that we surveyed so as to subsequently study the data collection:

- 1. Sound-proof booth: Chiefly used in simultaneous interpreting.
- 2. Portable interpreting equipment: Such as laptops, IPads, tablets, etc.
- 3. Telephone
- 4. Video
- 5. None of the above
- 6. Other (please, specify)

Despite the aforementioned institutions' classifications, we chose to divide the so called contexts into another section and, therefore, separated conference and community interpreting from the modes (i.e the classification proposed by Pöchhacker). We also added business negotiation as another possible answer. In our survey the contexts appear as follows:

- 1. Conference interpreting
- 2. Community/Public sector interpreting
- 3. Business negotiation
- 4. Other (please, specify)

In order to better understand the possible needs of the professional interpreters and future interpreters that we surveyed, we also considered it necessary to question the individuals on their field of expertise to find out if some fields had greater needs than others for technology. To achieve this, we extracted the fields from a directory for translators and interpreters (www.proz.com)⁷; they are classified as follows:

- 1. General interpreting
- 2. Judicial, legal, court and/or police interpreting
- 3. Military interpreting
- 4. Health or medical interpreting
- 5. Social interpreting
- 6. Business/Financial interpreting
- 7. Technical/Engineering interpreting
- 8. Science interpreting
- 9. Media interpreting
- 10. Other (please, specify)

Subsequently, we added legal interpreting as another independent field of expertise because the research lines of the projects, whose frameworks include this project, also investigate this domain.

In conclusion, we felt it necessary to follow Pöchhacker (2011: 13-16), as many classifications provided by the various aforementioned institutions were too vague for the survey/project.

Consequently, it has enabled us to analyse if the interpreters who share the same profession, but specialise in a different mode or field of interpretation, also share the same results, or if these results differ from the professional in other fields or modes.

⁷ The translation workplace, ND, Accessed 21st May 2014, from www.proz.com

Language technology applied to interpreting

Whilst language tools are limited, or unsatisfactory, the tools of the trade are improving. Until the 1990s it wasn't even possible for a translator to combine various writing systems within a single document. For instance, a translator working from Chinese to Thai, or Japanese to Russian, or vice versa. Then, in 1990, the development of Unicode came about, a system which can encode thousands upon thousands of characters from virtually any written language (Kelly and Zetzsche, 2012).

There is also a vast software industry which addresses the needs of professional translators in most fields (medical, legal, technical, business, science). These resources include online dictionaries, thesauri, localization tools, term banks, translation memories, concordancers, machine translation systems and text alignment programmes, amongst others.

In the domain of technology tools, one of the most useful tools for translators are the so called translation memories, due to their ability to store texts. "Think of it as a highend consignment shop: It's a database that stores past translations for reuse rather than translating from scratch." (Kelly and Zetzsche, 2012: 217-218).

Termbases are also databases used by translators more and more every day. However, "A termbase is less like a brick-and-mortar consignment shop and more like ebay, with lots of product information at your fingertip." (Kelly and Zetzsche, 2012: 218). In other words, the translator can choose the correct translation for each context.

"The fact is that translators need specialised corpora (monolingual and bilingual) tailored to their needs. For this reason, translators tend to build their own DIY ("Do-It-Yourself") specialised corpora." (Bowker and Corpas, 2015).

However, as Bowker and Corpas (2015) also state:

Despite this recent technological drive within the industry, translators are somehow reluctant to rely (exclusively) on automated tools. Rather, translators prefer to use a myriad of Internet-based aids and data, such as search engines, specialised searchable databases ("Invisible Web"), gateways, portals and directories, web-based applications, corpora, termbanks, etc.

In the world of interpreting, however, language tools are very poor and unsatisfactory. We do know of the existence of several tools and software applications whose aim is to cater to interpreters. Costa, Corpas and Durán (2014) list a series of tools in their paper, which we will proceed to define.

Intragloss, for example, is application software which serves to manage glossaries and documents. This tools allows us to import and export glossaries from and to Microsoft and Excel formats. This tool serves to gather previous information before the interpretation.

InterpretBank is another software tool which serves to manage and search for glossaries and term-related information. In other words, it can help during the preparation process (preparation of glossaries) and during the actual interpretation, i.e looking up words in the terminology list whilst in the interpreting booth.

Another practical tool is *Interplex UE*, which handles glossaries and allows us to classify terms relating to a particular field into multilingual glossaries. These terms can be searched for almost immediately. We can also export and import glossaries from and to Microsoft Word and Excel formats.

There are two more applications, *LookUp* and *The Interpreter''s Wizard* which are used to manage glossaries in various languages and which also allow the interpreter to look up a term within seconds.

Unit converters, such as *Convert* or *Converto*, and note-taking applications, such as *Evernote*, are also commendable for the interpreter. These tools can also be used as mobile devices.

In addition, Bilgen (2011) investigates terminology management in the context of conference interpreting due to the neglect these professionals suffer regarding translation technologies. This is due to the software programs only being designed to cater to translators and terminologists. The author also includes a survey addressed to professional interpreters in order to ascertain their needs and experience with computers. With the results from the survey data, the idea of a development of a terminology tool for interpreters is put forward.

It also serves to mention the existence of a computer-assisted tool for semiautomatic note-taking. Rafajlovska (2013) describes this tool in her paper. This is a useful tool for the consecutive interpreter because, not only can it take notes, but also via keywords it can convert those notes into a readable message. However, it only caters for language combinations Macedonian-French and Macedonian-English.

Along similar lines, as a pioneering interpreting project we can mention the investigation conducted by Pérez Pérez (2013), using two groups of university students. The experiment consisted of one group using corpus management programmes; and the second group prepared the vocabulary by extracting information manually from documents, in the traditional way. It was proven that the group who used the corpus management programmes for the preparation of the vocabulary were more precise when a terminological problem presented itself.

Since the Nuremberg trials in 1944-1945, when simultaneous interpreting came into the public eye, this mode of interpreting has always been linked with technology. As Diriker (2010: 329) states:

Oversized headsets were adjusted, wired systems gradually became wireless and booths were soundproofed [...] Technology advances have made it much easier for intepreters to access information which is crucial in this profession. Laptops and the internet now enable intepreters to access a broad palette of electronic resources, ranging from online dictionaries, term banks to numerous websites relevant to professional assignments.

Since the 90s, there has undoubtedly been an improvement in technology for interpreters. As Folaron (2010: 429) sustains:

Specialized translation technologies have added another dimension, playing a significant role in expanding in the translator's repertory of useful tools and resources for the task of translation.

However, our purpose is to take technology for intepreters one step further and focus on language technologies – or technology-assisted interpreting⁸ – such as audio input tools, computer-aided translation tools, glossary management tools, term banks and concordancers, amongst others.

⁸ As defined by Costa, Corpas and Durán (2014).

Survey presentation and preparation

The title we have given to the survey is *Technology Tools for Interpreters: Users' Awareness and Needs*. When the survey link is accessed first and foremost a message of anonymity appears, assuring the addressees that their responses in no way can be matched with any identifying information (Appendix III). The message reads as follows:

This survey is anonymous.

The record kept of your survey responses does not contain any identifying information about you unless a specific question in the survey has asked for this. If you have responded to a survey that used an identifying token to allow you to access the survey, you can rest assured that the identifying token is not kept with your responses. It is managed in a separate database, and will only be updated to indicate that you have (or haven't) completed this survey. There is no way of matching identification tokens with survey responses in this survey.

Before proceeding to describe the preparation of our survey, it would be pertinent to recall the project's main goals:

- Ascertain language tools used by interpreters and their opinion as to whether these tools satisfy their professional needs;
- If a lack of tool usage appears, verify if the cause is because they are unknown or because they are insufficient;
- Study how to improve language tools for the interpreters' profession.

An important decision in the decision making process was to choose between addressing the survey to professional interpreters and interpreting students at University, or only to professional interpreters. Our decision was to only focus on professional interpreters because our aim is to classify the results according to the modes of interpreting the professional specialises in. In general we consider it safe to say that most students are not familiar with language tools, especially when applied to interpreting.

The last step was to prepare the survey. We divided it into three sections: personal information, professional information and information regarding the use of technology. Please see table below for an overview of the sections:

	Title of the section	No. of questions	Types of questions
First section	Personal information	6	 Age, 2) Gender, 3) Nationality, Mother tongue(s), 5) Working language(s), 6) Additional non- working languages
Second section	Professional information	16	 Active languages, 2) Passive languages, 3) Country where professional activities take place, 4)-12) Professional background, 13)-16) Information regarding types of interpreting
Third section	Information regarding the use of technology	13	1)-13) All questions related to the use of technology tools and resources

None of the questions are mandatory, hence the reception of partial completions, which we will not take into account. We will only study the results of those who responded to the survey in full.

In the second section, please note the denomination of active and passive languages used by the European Commission and the AIIC. Active language as defined by the AIIC (2013):

The interpreter's native language (or another language strictly equivalent to a native language), into which the interpreter works from all her or his other languages in both modes of interpretation, simultaneous and consecutive.

And passive languages: "Languages, of which the interpreter has a complete understanding and from which she or he work." (AIIC, 2013).

It was considered necessary to specify in brackets the meaning of each – interpret to and from, and interpret from – as some may not be familiar with the terms active and passive languages.

The same applies to question 6 in the first section titled "Additional non-working languages (C)", as defined by the Common European Framework of Reference for Languages (CEFR).⁹

In this section we wanted to ascertain if any interpreters had knowledge of any other language, but do not use it in a professional context, and if they would use it as a working language if they had more and/or better language tools at their disposal.

As mentioned above, the information regarding types of interpreting was chiefly extracted from Pöchhacker (2011: 13-16) and the directory provided by proz.com – translation workplace and network.

With regards to the third section – information regarding the use of technology – if the answer is no to the use of technology, the next question automatically appears. However, if the answer is yes, a pull-down menu appears asking which type of technology they use. This option appears on two occasions, as we ask if they use any technology tools and resources prior to an interpretation and if they use any during an interpretation.

Lime Survey

Lime Survey was chosen as our server, which is available to students, investigators and lecturers at the University. The only issue was that as soon as a student finishes their degree at the University, Lime Survey automatically erases all work. We chose to create the survey via an account that belongs the research group LEXYTRAD. In this way, the survey would still be available if in the future we wanted to extract more results and elaborate on the topic.

Recently the survey has been imported to LEXYTRAD's survey and therefore is currently accessible through a different link (links indicated below).

However, the link used when distributing the survey is still active and more results can be extracted if necessary.

⁹ For more information please visit http://www.coe.int/t/dg4/linguistic/Cadre1_en.asp

Lime Survey is free of charge, practical and intuitive. It also includes the option to create a survey in different languages. In this case, we chose English because the whole project is going to be written and defended in English. Additionally, all of the associations work with English as a first or second language.

It also gives you the option to choose the type of question. For instance, for the response to questions 4 and 5 – "Nationality" and "Mother tongue(s)", respectively – the latter being plural as in some countries where two languages are considered to be official, some individuals have two native languages – we chose TYPE S (short free text) as we would have had to provide the survey with an infinite number of languages and nationalities as we have contacted associations from all over the world. This gives the respondent the possibility to type their own response.

In question 12, for instance, we ask the addressees if they think that the use of technology tools can impact the quality of interpreting – asking them to rate from 1 to 5, with 5 being the highest score. In this case it is defined as an array type: 5 point choice question.

Once the survey is created, Lime Survey automatically generates a link to it, making it easy to access. The programme allows us to extract the data to Excel and Word formats, in addition to generating pie charts from the results obtained, making it easier to study the results.

Survey distribution

Prior to the distribution of the survey, various researchers and professional interpreters commented during the elaboration process for further assurance and opinions (Ruslan Mitkov, Pablo Pérez, Isabel Durán, Míriam Seghiri and Gabriel Cabrera).

Furthermore, once the survey was compiled and uploaded to the chosen server, two anonymous professional interpreters tested the survey beforehand for further assurance from professionals in the field.

After the compilation of the survey, we put together a list of possible targets, which include translation and interpreting associations, both inside and outside of Europe. The groups contacted correspond to the following (Appendix I):

European groups

- ADÜ Nord (Assoziierte Dolmetscher und Übersetzer in Norddeutschland e.V.)
- AICE (Asociación de Intérpretes de Conferencia de España)
- AIIC (International Association of Conference Interpreters)
- AITC (Association Internationale des Traducteurs de Conférence)
- AITI (Associazione Italiana Traduttori e Interpreti)
- APCI (Association of Police and Court Interpreters)
- APTIC (Associació Professional de Traductors I Intèrprets de Catalunya)
- ASATI (Asociación Aragonesa de Traductores e Intérpretes)

- ATICOM (Association of Professional Freelance Translators and Interpreters, Germany)

- ATR (Romanian Translators Association)
- ATRAE (Asociación de Traducción y Adaptación Audiovisual de España)
- BDÜ (German Translators and Interpreters Association)
- CBTIP-BKVTF (Belgian Chamber of Translators, Interpreters and Philologists)
- Conference Interpreters UK
- ESPAIIC (Spanish Association of AIIC)
- EULITA (The European Legal Interpreters and Translators Association)

- FIT (Fédération Internationale des Traducteurs)
- Hermes Traducciones y Servicios Lingüísticos (Translation company located in Spain)
- IoL (Institute of Linguists)
- ITI (Institute of Translation and Interpreting, United Kingdom)
- ITIA (Irish Translators' and Interpreters' Association)
- Österreichischer Übersetzer und Dolmetscherverband
- SFT (Syndicat national des Traducteurs professionnels)
- VdK (Verband der Konferenzdolmetscher)

Non-European groups

- AATI (Asociación Argentina de Traductores e Intérpretes)
- AIETI (Asociación de Investigación y Especialización sobre Temas Iberoamericanos)
- ALTA (American Literary Translators Association)
- ATA (American Translators Association)
- ATIA (Association des traducteurs et interprètes d'Alberta)
- ATIDA (Arabic Translation and Intercultural Dialog Association)
- ATIF (Association of Translators and Interpreters of Florida)
- ATINS (Association of Translators and Interpreters of Nova Scotia)
- ATIO (Association of Translators and Interpreters of Ontario)
- ATPP (Asociación de Traductores Profesionales del Perú)
- ATTLC-LTAC (Literary Translators' Association of Canada)
- AUSIT (Australian Institute of Interpreters and Translators)
- CATI (Carolina Association of Translators and Interpreters)
- CTA (Colorado Translators Association)
- Interpreters' Division of ATA
- NCATA (National Capital Area Chapter of the American Translators Association)
- NETA (New England Translators Association)
- NMTIA (New Mexico Translators and Interpreters Association)
- NOTA (Northeast Ohio Translators Association)
- NOTIS (Northwest Translators and Interpreters Society)
- NYCT (New York Circle of Translators)
- OTIAC (Ordre des Traducteurs et Interprètes Agréés du Québec)

- SCATIA (Southern California Area Translators Association)

Facebook groups

- 1. AETI
- 2. Traducción e Interpretación UMA
- 3. Traductores e intérpretes
- 4. Traductores e Intérpretes de Málaga

Forums

https://datugr.wordpress.com/tag/foros-de-traduccion-e-interpretacion/ https://es.groups.yahoo.com/neo/groups/forotraduccion/info www.proz.com www.translatorscafé.com

All of the associations were contacted via email – these addresses were found on their website – and within the email we provided them with the link to the survey and a brief message defining our goal and the purpose their responses will be used for. The message read (Appendix II):

Within the INTELITERM project (grant no. FFI2012-38881, MEC, 2012-2015), a survey is being conducted about technology tools for interpreters.

Our main goal is to gather information to better ascertain interpreters' technology awareness and needs in order to design new tools and improve existing ones.

We would greatly appreciate if you could fill out our online survey. It should take no longer than 5-10 minutes. All of your information and responses will remain anonymous.

URL: http://encuestas.uma.es/51591/lang-en

As mentioned before, a new link has been provided by the platform of research group LEXYTRAD: http://lexytrad.es/limesurvey/index.php/51591/lang-en

In response to several replies received requesting assurance of our usage for academic purposes and offering in this case to distribute the survey to their personal contacts, we replied with the following message:

This survey is being conducted within the framework of the research group LEXYTRAD, University of Malaga (www.lexytrad.es). The survey results will be used solely for non-commercial research or academic purposes.

The other means of distribution we chose was Facebook as many important interpreting associations have their own private contact group on this social network, composed of individuals who work for the association and also of individuals who are merely interested in their work. Our aim was to survey as many professional interpreters as possible.

We distributed the survey twice: the first time on the ninth of February 2014, when it was sent from the email address and Facebook page of research group LEXYTRAD, whose head is Gloria Corpas..

The second time the distribution was carried out via our personal email addresses and Facebook pages on the fourteenth of March 2014 and is still open for access.

Addressees	Form of contact
Associations and institutions	Email Online contact forms
Freelance interpreters	Email
Forums	Forums

Below is an overview of addressees and the form of contact:

Responses received

Having explained what our survey consists of, we will now proceed to analyse the results.

In total we have received 133 responses, the majority being women – 84 females (63.15%) have responded versus 33 males (24.21%), respectively.

Another interesting point arose regarding question number 7, inquiring years of professional experience as an interpreter, with the majority having answered that they have been working in the profession for over 10 years. This constitutes a total of 45.11% of the people who responded.

In answer to the question if they also work as a translator, 66.92% replied affirmatively whilst only 15.79% replied negatively.

Most of our respondents admitted to not holding a BA degree in Interpreting – 60.90% versus 22.56% who do, but do hold a University degree in another field (57.14%). Of the 22.56% who do hold a BA degree in Interpreting, 32.33% also hold a Master's degree. However, 45.86% admitted to having received training in Translation and Interpreting, different from a University degree.

In the next chapter we will analyse the results taking into account the modes and fields our professionals specialise in and find out if they share the same results or these differ from the ones specialised in other fields and/or modes. As we have mentioned before, we will only take into account the people that responded to all of the questions that the survey contains in order to obtain more accurate results.

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CHAPTER 2: RESULTS ANALYSIS

Introduction

As mentioned before, in this section we will analyse the survey data according to the types of interpretation our survey respondents specialise in, albeit consecutive, simultaneous, whispered, sight, liaison, sign language or over-the-phone; these categories being those extracted from Pöchhacker (2011: 13-16).

We will analyse each mode individually so as to better understand what each one entails and their technology needs. We also seek to find out if technology tools can be of greater use to some more than others, as well as ascertaining if any modes already use more technology tools than others.

Consecutive interpreting

The individuals who practice consecutive interpreting constitute a majority of 79.70% of the total, which corresponds to 106 individuals out of 133. This type is the most widely practiced amongst our respondents. However, the vast majority of consecutive interpreters also work in other modes.

In this domain, the vast majority will use technology tools and resources prior to an interpretation in order to gather information on the subject beforehand. However, there are still an important number of individuals who use non-technology tools. The most popular answers, in descending order, were monolingual and bilingual dictionaries, glossaries and thesauri, closely followed by web-based resources, and parallel texts and other printed materials.

Very few use technology tools during an interpretation, but most agree that they could have a positive impact on the outcome. The most used tools used during an assignment correspond to bilingual dictionaries and glossaries.

Computer-aided translation tools, translation memory systems, machine translation systems, term extractors, termbanks, concordancers and corpora each constitute at most 20% or less of the tools used prior to an interpretation.

In this domain most of our respondents agree on not using technology tools and resources during a consecutive interpreting job due to the lack of time. In total, however, only 9 individuals awarded the questions regarding the usefulness and impact of technology tools lower than 3 out of 5 (5 being the highest score). This comes to prove that they believe tools would be of utility.

Most consecutive interpreters who work in conferences have mentioned that the original speaker is also a key element. Due to the fact that nowadays more and more speeches are memorised prior to the event, or even read out during the event, makes the interpreter's job a lot harder. Because of this, various conference interpreters have mentioned that the client should offer source material beforehand to prepare for the assignment (subject matter, information on the speaker, conference organiser, keywords, etc.).

Most mentioned also the use of pen and paper, which serves to prove that the traditional way of taking notes is still ongoing. As mentioned before, note-taking applications, for instance *Evernote*, have also recently been designed and are also commendable for the interpreter.

Most allude to the lack of time during the task to consult any kind of technology tools. However, we believe that glossary management tools, such as *InterpretBank*, *Interplex UE*, *LookUp* and *The Interpreter's Wizard* (cf. Costa, Corpas and Durán, 2014: 27-32) could be of great use to interpreters because they enable us to classify terms depending on the field and to look up these terms within seconds. It would seem that our interpreters are unaware that this type of technology exists.

It also serves to mention once again the tool that Rafajlovska (2013) describes which can be useful for the consecutive interpreter because it can take notes and, via keywords, convert those notes into a readable message. It is a CAT tool for semiautomatic note-taking. This particular tool that she describes only deals with Macedonian-French and Macedonian-English language combinations. However, perhaps in the near future interpreters who work with other language combinations could also benefit from this type of tool.

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Simultaneous interpreting

A total of 92 individuals specialise in this mode, corresponding to a total of 69.17%. Most of our simultaneous interpreters also work in consecutive interpreting; therefore, the results regarding technology tools are similar. However, there are some differences. This mode is probably the most difficult mode to cater for due to its immediacy. The simultaneous interpreter is required to listen to the source language whilst at the same time provide an oral translation.

This mode in itself requires technical equipment, such as a sound proof booths, headsets and microphones. All of this equipment can also be portable, which is also a major development in this field of interpreting.

Our simultaneous intepreters from the UN and the EU have admitted to using technology tools prior to the task and during the task, corresponding to bilingual dictionaries, glossaries and thesauri, as well as databases and termbanks, during the preparation process. They also use audio input material, such as videos and recording to prepare for a task, which correspond in most cases to videos of the plenary sessions of the EU Parliament. One of our interpreters has also stated that the access to these videos should be faster.

Regarding technology tools during an interpreting task, most of our simultaneous interpreters do not count on help from technology resources. The only tools used in specific circumstances during an assignment are bilingual dictionaries, glossaries and, in some cases, web-based resources.

Due to the pressure that simultaneous interpreters are under in the booth, and to the lack of time, especially in this mode, our simultaneous interpreters agree that in the booth there is limited time for technology.

During an interpretation, the vast majority will use bilingual dictionaries and their own glossaries to search for terms.

Simultaneous interpreters also agree that their colleague in the booth is a key element, as he/she can be of technical support if an unknown term should present itself. He/she can have their laptop, IPad or tablet at the ready and quickly look up the term whilst the interpreter continues working. For this purpose, our colleague is key, not to mention access to the internet and a fast connection.

As we have mentioned before in chapter 1, there are various technology tools which are aimed at simultaneous interpreting, such as numerous glossary management tools (e.g. *Intragloss, InterpretBank*), search tools (e.g. *LookUp* and *The Interpreter's Wizzard*) and unit converters (e.g. *Convert* and *Converto*).

Search tools are especially useful for simultaneous interpreting because they allow us to search for a term in a matter of seconds, should unknown terminology present itself.

Tools such a unit converters could also be of great use in this mode for converting, for example, from the Imperial System of units to the International system (if we work from English, as Imperial Units are still used in the United Kingdom). This type of tool is also available for Apple and Android devices and therefore can be downloaded onto our mobile phones as well as our laptops.

Whispered interpreting

The individuals who specialise in this mode of interpreting constitute 60.15% of the grand total, which corresponds to 80 individuals out of a total of 133.

Whispered interpreting is similar to simultaneous interpreting but without the need of a booth, which makes it more economical. The interpreter, who is sitting next to the listener, simply whispers to the listener the speech that is being delivered. This type is usually used during small events such as seminars, conferences or guided tours. Due to its similarities, most of our whispered interpreters are also simultaneous interpreters.

However, under specific circumstances and normally during small events, sometimes it can require a microphone and headsets. In these cases the interpreter stays close to the speaker and in a low voice delivers the speech into a microphone (usually wireless). The listeners hear the interpreted speech via headsets.

The vast majority of our whispered interpreters who responded to the survey admit to using monolingual and bilingual dictionaries, glossaries and thesauri prior to an assignment, as well as web based resources.

E-journals, e-periodicals and e-books are used also by many to gather information, but these tools have proven not as well favoured as web based resources and parallel texts as resources for gathering information and knowledge.

In this mode, as in simultaneous interpreting, audio input tools, such as videos and recordings, have proven to be commonplace.

Most of our whispered interpreters awarded the question regarding the usefulness and impact of technology tools between 3 and 5 (5 being the highest score).

With regards to tools during an assignment, the most used tools are bilingual dictionaries, glossaries and thesauri. However, only 50 of our simultaneous interpreters use these tools, with the rest stating they do not use any kind of tools during an assignment.

Various individuals who specialise in this mode have mentioned that glossary management tools in the form of portable software should be available for interpreters, thus enabling the professionals to create their own glossaries and access them during a task if they should encounter an unknown term.

The results of our whispered interpreters mostly coincide with our simultaneous interpreters because most of our simultaneous interpreters also work in whispered interpreting.

In this domain most of our respondents agree on not using technology tools and resources during an interpreting task. However, they would like to have access to interpreting-related software or applications.

Others do not agree and believe that the reference material from the client is sufficient, providing they receive information beforehand. They believe that the issue does not lie in the lack of tools, but interpreters do not receive enough information about the assignment in order to prepare for it.

Sight interpreting

The individuals who work in sight interpreting constitute 42.86% of the total, corresponding to 57 individuals.

In this domain, the interpreter is provided with the text of the speech to render into a different language whilst the speaker is delivering the speech.

Pöchhacker (2011: 17) defines this mode as follows: "The interpreter's target text production is simultaneous not with the delivery of the source text but with the interpreter's real time (visual) reception of the written source text."

Most of our liaison interpreters also work in another domain, albeit consecutive, simultaneous, liaison or over-the-phone interpreting, thus making it hard to determine with certainty whether this domain requires more or less technology than the others, or vice versa.

Nevertheless, in this domain, bilingual and monolingual dictionaries, glossaries and thesauri, along with web based resources are still the most popular tools.

Parallel texts and other printed materials are used by a total of 51.88% of our respondents, which correspond mostly to sight interpreters. Therefore, non-technology tools prove to be used a fair amount in this domain, more than the others, as well as contact with experts in the pertinent fields.

Regarding the use of technology tools during a task, as in the other fields, the most used tools are bilingual dictionaries, glossaries and thesauri. In most cases, our professionals use their own glossaries during a task to quickly look up terminology.

Furthermore, in this domain, our interpreters also mention the need for a quick access tool, if possible a software application, which will enable them to take a quick glance at a term.

Interpreters in this mode have also mentioned that they would like to have more background information at their disposal, albeit printed or online, such as parallel texts, PowerPoint presentations or speeches.

As in the other modes, opinions are divided. Nevertheless, most agree that easy-touse, quick and effective tools could impact the quality of interpreting, especially prior to the task. However, regarding technology tools during an assignment, most agree that there is not enough time to consult technology.

Liaison interpreting

The respondents who specialise in this mode of interpreting constitute 46.62% of the total, which corresponds to 62 individuals.

In this case the interpreter must establish conversation between two parties who speak a different language. Therefore he/she must continuously switch between two languages during the task to enable communication.

As opposed to simultaneous interpreting, the interpreter does have more control over the matter. It is possible, for example, to interrupt the speaker or ask our client to clarify or repeat a section if necessary.

As in the previously described modes, bilingual dictionaries, glossaries and thesauri are the popular tools utilised during the documentation phase prior to the task, closely followed by monolingual dictionaries, glossaries and thesauri, as well as web based resources.

Regarding the usage of tools during an assignment, most of the respondents who work in this mode agree on mostly using bilingual dictionaries and glossaries to look up a specific term, albeit on their laptop, IPad or mobile phone.

As in the case of all modes, especially consecutive interpreting, our liaison interpreters also mention the lack of information received in most cases by the client and agree that they should be provided with more information in order to prepare for an upcoming task.

Note-taking tools, such as *Evernote*, could also prove useful in this mode as the liaison interpreter might also need to take notes in order to later reproduce in the most faithful way possible what has been said. Most of our respondents who practice this mode resort to pen and paper to take notes.

In this mode, opinions regarding the usefulness of technology tools are also divided. Very few use technology tools during an interpretation, but most agree that they could have a positive impact on the outcome. However, most only resort to bilingual dictionaries and glossaries during an assignment.

Liaison interpreting mostly occurs during the context of community interpreting, in which the most common fields of expertise practiced by our respondents correspond to business, law and medical interpreting. For this reason, liaison interpreters also find corporate websites useful to prepare for an assignment.

Sign language interpreting

Only one respondent admitted to working in this mode of interpreting. We cannot provide any information regarding the technology this respondent uses as it is not clear because the professional also specialises in other modes.

This mode is different to the rest as it does not consist of transforming a speech from one oral language into another; instead it requires the interpreter to deliver the speech into sign language using mainly hand and arm movements. However, linguists also consider sign language to be a language in as much as it is also used for communication for people who are hearing impaired or speech impaired. It can be rendered from sign to voice or voice to sign. This mode also is also very complex and requires great receptive and expressive skills.

In this mode, for instance, language technology would need to acquire a different form based on a different type of communication that does not use sound patterns, but instead body language and movements.

We know of the existence of some innovative software which transforms sign language into text, sign language into spoken language, or vice versa. Some examples of this cutting edge technology are *Kinect* – software designed by Microsoft which transforms sign language into speech and vice versa¹⁰ (Microsoft, 2013); and *Signing Savvy* – dictionary resource which enables the user type in a word and view sign videos in ASL (American Sign Language).¹¹

Computer scientists at the University of Aberdeen are also developing technology which is able to transform sign language into text. It is known as the *Portable Sign Language Translator (PSLT)* and it consists of a software application which can be downloaded onto portable devices, such as laptops, mobile phones, IPads or tablets. The user signs into the portable device he/she is using and the signs are translated by the application into text, enabling the person they are conversing with to read the message¹². It can be used with BSL (British Sign Language) and Makaton, where signs are used with speech.

¹⁰ For more information please visit http://research.microsoft.com/en-us/collaboration/stories/kinect-sign-language-translator.aspx

¹¹ Accessible at http://www.signingsavvy.com

¹² For more information please visit from http://www.abdn.ac.uk/news/4294/

Over-the-phone interpreting

A total of 47 individuals – 35.34% in total – declared that they work in this mode of interpreting. Nowadays this mode is becoming more and more popular as the interpreters can work from home and clients avoid paying their travel fees.

Interpreters who work over the phone claim, as in the other fields, to use monolingual and bilingual dictionaries, glossaries and thesauri, as well as web based resources as their main tools to prepare for an assignment.

During over-the-phone interpreting, most of our respondents admit to using bilingual online dictionaries and glossaries to look up terms on their laptops, IPad or mobile devices whilst interpreting, should an unknown term present itself.

Over-the-phone interpreters also mention the lack of previous information they receive from the client, preventing them from accurately preparing for an assignment.

In this mode, as in the other modes, web based resources are commonplace, especially corporate websites if the interpretation is situated within the fields of legal, medical or business interpreting.

The fields we provided are also interpreted over-the-phone, therefore interpreters in this field also benefit from bilingual specialised glossaries, albeit online or glossaries they have compiled themselves.

Our interpreters also mention the need for better specialised dictionaries to cater for different fields.

Most of the professionals in this field agree that technology tools would be of use to interpreters and could impact the quality of their work. They agree that they would like to be able to access such tools online, as portable software or as application software.

In descending order, the most used tools for gathering information, apart from monolingual and bilingual dictionaries, glossaries and thesauri are: web-based resources, parallel texts, e-journals, e-periodicals and e-books; video recordings, databases, termbanks, CAP tools, translation memory systems and corpora; machine translation systems and concordancers. Regarding tools used during an interpretation, apart from bilingual dictionaries and glossaries, parallel texts and web based resources are also used to a lesser extent.

Tools such as databases, termbanks and corpora are used by 18.17 and 4 individuals, respectively.

Other

A percentage of 4.51% (6 respondents) stated that they work in other types of interpreting, different to the ones we provided. These individuals answered: Business, online interpreting, court, movies, conference interpreting and church interpreting (note that we had provided conference interpreting).

Our movie interpreter, who specialises only in this field, claims to not use any technology tools prior or during an interpretation, but has awarded top score to the question regarding the usage of technology tools for interpreters. However, this person does not think they will completely impact the quality. They will be very useful but not highly impact the quality of the profession (3 out of 5).

Our church interpreter, who also specialises in consecutive, simultaneous and whispered interpreting, also uses corporate websites and *Weblink*.

The interpreters who stated they specialise in business, online, court¹³ and conference interpreting, as in the modes aforementioned – consecutive, simultaneous, whispered, sight and liaison – also use glossaries, dictionaries and thesauri to prepare for a task. Monolingual dictionaries, glossaries and thesauri, as well as web based resources, parallel texts, e-journals, e-periodicals and e-books also have proven to be of use to these fields, with the vast majority resorting to them to prepare for an assignment.

¹³ Note the survey provided these three types as fields instead of modes.

CONCLUSIONS

Having received 133 responses and analysed them, we can reach the conclusion that the majority believe that technology tools would be of use to interpreters and can impact the quality of the actual interpretation.

In answer to the question as to whether they use technology tools and resources during an interpretation, 48.12% answered yes, whilst 36.84% answered no, which means that approximately only half of the professional interpreters we surveyed use tools during the interpretation itself – mostly bilingual dictionaries and glossaries.

In general we can clearly state that technology tools shed a whole new light on the profession and constitute a whole new range of possibilities for interpreters. Even though the world of technology tools for interpreters is growing and improving, it is still fair to say that these tools are fairly primitive and, in most cases, unheard of.

As Costa, Corpas and Durán (2014: 32) state: "There is an urgent need to develop technologies that automate the process, increase the productivity and ease the labour-intensive activities of an interpreter."

Our main goal was to ascertain interpreters' technology awareness in order to verify if the tools they know fulfil their professional needs. It would seem that there is a general lack of awareness of the existence of tools aimed at interpreters.

We also considered it necessary to ask our respondents their opinion as to whether technology tools could be of use to them. Most of them believe that they would be useful but others still lack faith in technology tools for interpreters, albeit because of the lack of time or because they believe technology tools distract more than help the professional.

By means of this final year project we seek to prove that there is a need to develop language tools for interpreters, albeit the ones used during the preparation stage or during the interpreting task.

We would like to stress that these language tools will merely be a tool; they will not turn somebody who does not master the profession into a star interpreter. However, they can largely improve the outcome and we believe are of utmost importance. Needless to say, the interpreter still needs a good command of the source language and the target language, coupled with knowledge of both cultures and exceptional common knowledge. As one of our respondents stated: "Other indispensable tools are the interpreter's personality and power of analysis based on long-term knowledge and experience."

Most of our respondents agreed that they simply do not have enough time during an interpreting task to consult technology tools. Therefore maybe the next step is to create a tool that can respond immediately to a terminological problem. As we have mentioned before, *LookUp, Interplex UE* and *The Interpreter's Wizard* are glossary management tools aimed at simultaneous interpreters whilst in the booth. It enables them to look up terminology within seconds (Costa, Corpas and Durán: 2014).

In conclusion, there is still a long way to go but with the correct knowledge and by means of ascertaining intepreters' needs it is safe to say we are half way there. We also need to be in the right frame of mind to believe that language tools can be of use to the interpreter.

A vast numbers of our respondents have mentioned the lack of background information provided by the client in order for the interpreter to prepare for an assignment, thus proving the neglect of the interpreters' profession by outsiders.

Due to this neglect, technology tools could be of great use to the interpreter during an assignment, considering the professionals receive very little, or sometimes do not receive any reference material from their clients.

By no means will a computer tools replace interpreters and we think it is safe to say that it is one of the professions that do not need to fear being replaced by a computer as language is communication and, therefore, interpreting is merely communication, and only the human mind is able to analyse, synthesise and string words together to make a meaningful sentence. As another one of our respondents said: "Sometimes our minds work faster than a computer."

Nevertheless, sometimes the interpreter is considered to be a "walking dictionary" and considering the complexity of the profession and the immediate need for solutions, this is where language tools play an important part.

Each day there we encounter cutting edge research which requires the elaboration of new terms – neologisms – which in turn requires the interpreter to update his/her knowledge every day.

Additionally, the vast amount of fields an interpreter has to deal with also adds more complexity to the profession. An interpreter can come across terms for all kinds of fields and has to be prepared to come up with an equivalent within a short period of time (within milliseconds in the case of simultaneous interpreting).

Some will argue that an interpreter must learn to work with the meaning of the message as a whole and not so much with the terms as individual elements, which means focusing on the general idea instead of reproducing literally what the speaker has said. When translating, however, the task is different; a translator has to be as faithful to the author as possible.

Nevertheless, in specialised fields terminology is an essential component and this is where terminology tools can be practical and beneficial.

We offer a cutting edge approach to the discipline in the hope that new technology tools will be developed and existing ones will be improved, taking into account the needs of the profession. These tools will open up a whole new world of possibilities for interpreters to benefit from.

The way forward is, by means of ascertaining interpreter's technology awareness and needs, to improve existing tools and create new ones aimed at professional interpreters to facilitate their job and provide them with the necessary information before (during the preparation phase) and during the task.

We have provided numerous examples where we can demonstrate that technology tools can improve the results of an interpreting task. For example, Pérez Pérez (2013), in his PhD dissertation, demonstrates that the group of students that were provided with corpora management programmes to prepare for the task gave more accurate solutions than those who extracted the information manually from documents, i.e in the traditional way. In spite of the benefits of corpora for interpreters, only 22 of our respondents claim to use corpora during the preparation phase (4 of these 22 respondents also use corpora during an interpreting assignment).

We believe that the future of interpreting lies in technology tools. This generation of interpreters already benefit from some tools which facilitate and improve the task immensely. However, more research and development need to be carried out for our future interpreters.

Future research could consist of elaborating on interpreters' awareness and needs so as to improve existing tools and develop new ones.

Our hypothesis was that whilst translators have a vast number of technology tools they can rely on, interpreters do not benefit from these tools at the same level. According to our survey, it would seem that our respondents are not aware of the tools that are designed for interpreters, albeit simultaneous, consecutive, liaison, etc. It would also seem that the tools they do use do not completely satisfy their needs, due to the lack of time they are constantly engaged with.

A next step in the right direction could be to elaborate on the needs of interpreters, taking into account the difficulties they tend to encounter, and develop additional and more favourable language tools for interpreters.

This project consists of an initial approach towards language tools applied to interpreting taking into account interpreters' awareness and needs by means of a survey. We consider it our contribution to the world of interpreting in the hope that it will be taken on board and technology tools for interpreters will be improved and developed in order to facilitate the profession and improve the results.

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APPENDIX I: SURVEY DISTRIBUTION

European interpreting groups

- ADÜ Nord (Assoziierte Dolmetscher und Übersetzer in Norddeutschland e.V.)
- AICE (Asociación de Intérpretes de Conferencia de España)
- AIIC (International Association of Conference Interpreters)
- AITC (Association Internationale des Traducteurs de Conférence)
- AITI (Associazione Italiana Traduttori e Interpreti)
- APCI (Association of Police and Court Interpreters)
- APTIC (Associació Professional de Traductors I Intèrprets de Catalunya)
- ASATI (Asociación Aragonesa de Traductores e Intérpretes)
- ATICOM (Association of Professional Freelance Translators and Interpreters,

Germany)

- ATR (Romanian Translators Association)
- ATRAE (Asociación de Traducción y Adaptación Audiovisual de España)
- BDÜ (German Translators and Interpreters Association)
- CBTIP-BKVTF (Belgian Chamber of Translators, Interpreters and Philologists)
- Conference Interpreters UK
- ESPAIIC (Spanish Association of AIIC)
- EULITA (The European Legal Interpreters and Translators Association)
- FIT (Fédération Internationale des Traducteurs)
- Hermes Traducciones y Servicios Lingüísticos (Translation company located in Spain)
- IoL (Institute of Linguists)
- ITI (Institute of Translation and Interpreting, United Kingdom)
- ITIA (Irish Translators' and Interpreters' Association)
- Österreichischer Übersetzer und Dolmetscherverband
- SFT (Syndicat national des Traducteurs professionnels)
- VdK (Verband der Konferenzdolmetscher)

Non-European interpreting groups

- AATI (Asociación Argentina de Traductores e Intérpretes)
- AIETI (Asociación de Investigación y Especialización Sobre Temas Iberoamericanos)
- ALTA (American Literary Translators Association)
- ATA (American Translators Association)
- ATIA (Association des traducteurs et interprètes d'Alberta)
- ATIDA (Arabic Translation and Intercultural Dialog Association)
- ATIF (Association of Translators and Interpreters of Florida)
- ATINS (Association of Translators and Interpreters of Nova Scotia)
- ATIO (Association of Translators and Interpreters of Ontario)
- ATPP (Asociación de Traductores Profesionales del Perú)
- ATTLC-LTAC (Literary Translators' Association of Canada)
- AUSIT (Australian Institute of Interpreters and Translators)
- CATI (Carolina Association of Translators and Interpreters)
- CTA (Colorado Translators Association)
- Interpreters' Division of ATA
- NCATA (National Capital Area Chapter of the American Translators Association)
- NETA (New England Translators Association)
- NMTIA (New Mexico Translators and Interpreters Association)
- NOTA (Northeast Ohio Translators Association)
- NOTIS (Northwest Translators and Interpreters Society)
- NYCT (New York Circle of Translators)
- OTIAC (Ordre des Traducteurs et Interprètes Agréés du Québec)
- SCATIA (Southern California Area Translators Association)

Facebook groups

- 1. AETI
- 2. Traducción e Interpretación UMA
- 3. Traductores e intérpretes
- 4. Traductores e Intérpretes de Málaga

Forums

https://datugr.wordpress.com/tag/foros-de-traduccion-e-interpretacion/ https://es.groups.yahoo.com/neo/groups/forotraduccion/info www.proz.com www.translatorscafé.com

APPENDIX II: DISTRIBUTION MESSAGE

Within the INTELITERM project (grant no. FFI2012-38881, MEC, 2012-2015), a survey is being conducted about technology tools for interpreters. Our main goal is to gather information to better ascertain interpreters" technology awareness and needs in order to design new tools and improve existing ones. We would greatly appreciate if you could fill out our online survey. It should take no longer than 5-10 minutes. All of your information and responses will remain anonymous.

URL: http://encuestas.uma.es/51591/lang-en

APPENDIX III: MESSAGE OF ANONYMITY

This survey is anonymous.

The record kept of your survey responses does not contain any identifying information about you unless a specific question in the survey has asked for this. If you have responded to a survey that used an identifying token to allow you to access the survey, you can rest assured that the identifying token is not kept with your responses. It is managed in a separate database, and will only be updated to indicate that you have (or haven't) completed this survey. There is no way of matching identification tokens with survey responses in this survey.

APPENDIX IV: ABSTRACT IN SPANISH

Gracias al amplio abanico de tecnologías lingüísticas a disposición de los traductores, los profesionales se benefician de estas herramientas con el fin de facilitar su trabajo y adquirir mejores resultados.

Con la finalidad de determinar cuáles son las herramientas tecnológicas que usan los intérpretes, hemos elaborado y lanzado una encuesta a profesionales de la interpretación con el objetivo de conocer las herramientas que usan y su grado de satisfacción con respecto a las herramientas disponibles en el campo de la interpretación.

El objetivo de este trabajo de fin de grado es investigar sobre la posible aplicación de las tecnologías lingüísticas a la interpretación y, más concretamente, estudiar las necesidades tecnológicas de los intérpretes a través de una encuesta.

APPENDIX V: KEYWORDS IN SPANISH

Tecnologías lingüísticas, encuesta, interpretación, intérpretes profesionales.

APPENDIX VI: CONCLUSIONS IN SPANISH

Tras la recepción de 133 respuestas y su correspondiente análisis, hemos llegado a la conclusión de que la mayoría de los intérpretes creen que las herramientas tecnológicas serían de utilidad para ellos y podrían mejorar la calidad de la interpretación.

En respuesta a la pregunta sobre si usan herramientas tecnológicas y recursos durante una interpretación, el 48,11 % respondió que sí, mientras que el 36,84 % respondió que no, lo que quiere decir que aproximadamente solo la mitad de los intérpretes profesionales encuestados usan herramientas durante una interpretación (en su mayoría diccionarios bilingües y glosarios).

En general podemos afirmar con seguridad que las herramientas tecnológicas arrojan una nueva luz sobre la profesión y ofrecen un nuevo abanico de posibilidades a los intérpretes. Aunque el mundo de las herramientas tecnológicas para los intérpretes se encuentre en auge y esté mejorando, cabe decir que estas herramientas siguen siendo bastante rudimentarias y, en la mayoría de los casos, desconocidas.

Tal y como afirman Costa, Corpas y Durán (2014: 32): "Existe una necesidad urgente de desarrollar tecnologías que automaticen el proceso, incrementen la productividad y faciliten las actividades arduas del intérprete".

Nuestro objetivo principal consistía en determinar los conocimientos tecnológicos de los intérpretes con el fin de verificar si las herramientas que conocen satisfacen sus necesidades profesionales. Parece ser que existe un desconocimiento general sobre la existencia de herramientas dirigidas a los intérpretes.

También consideramos pertinente preguntar a nuestros respondientes su opinión sobre si creen que las herramientas tecnológicas les podrían ser de utilidad. La mayoría creen que sí serían de utilidad pero otros tienen poca confianza en las herramientas, bien por la falta de tiempo, o bien porque creen que las herramientas tecnológicas desconcentran más de lo que ayudan al profesional.

A través de este trabajo buscamos demostrar que existe una necesidad de desarrollar herramientas lingüísticas para los intérpretes, ya sea las que se usan durante la fase de preparación, o durante la interpretación en sí. Queremos hacer hincapié en que estas herramientas lingüísticas corresponderían meramente a una herramienta, es decir, no convertirán a una persona que no sepa interpretar en un profesional de la interpretación. Sin embargo, podrían mejorar enormemente el resultado, así que consideramos que son de gran importancia. Sobra decir que el intérprete seguirá necesitando un dominio excelente de la lengua de origen y de la lengua meta, junto con el conocimiento de ambas culturas, y una cultura general extraordinaria. Tal y como afirma uno de los respondientes: "Otras herramientas indispensables son la personalidad del intérprete y su capacidad de análisis, basado en conocimientos amplios y experiencia".

La mayoría de los respondientes están de acuerdo en que existe una falta de tiempo importante durante una interpretación para consultar herramientas tecnológicas, así que tal vez el siguiente paso deba ser crear una herramienta que pueda solucionar inmediatamente una duda de terminología. Como hemos mencionado en el desarrollo del trabajo, *LookUp, Interplex UE y The Intepreter's Wizard* son herramientas de gestión de glosarios dirigidas a los intérpretes simultáneos mientras están en cabina. Les permite buscar terminología en cuestión de segundos (Costa, Corpas y Durán: 2014).

En conclusión, aún queda bastante camino que recorrer pero con el conocimiento necesario y con el estudio de las necesidades de los intérpretes, podemos afirmar que el trabajo está a medio hacer. Además necesitamos tener confianza en las herramientas y creer que le serán de utilidad al intérprete.

Un gran número de respondientes han mencionado la falta de información previa por parte de los clientes, que le sirve al intérprete para preparar un trabajo de interpretación, lo que demuestra la indiferencia de las personas ajenas al mundo de la interpretación hacia la profesión.

Debido a esta negligencia, las herramientas tecnológicas podrían ser de gran utilidad para los intérpretes durante un trabajo de interpretación, teniendo en cuenta que los profesionales reciben muy poca, o ninguna, información previa de los clientes.

De ninguna manera las herramientas informáticas sustituirán al intérprete. Es más, pensamos que se puede afirmar con seguridad que los intérpretes son unos de los pocos profesionales que no deben temer por su trabajo. Los ordenadores no los podrán sustituir puesto que el lenguaje es comunicación y, por tanto, interpretar es comunicar.

Solamente la mente humana es capaz de analizar, sintetizar y unir palabras para formar oraciones con sentido. Como dijo otro respondiente: "A veces nuestra cabeza funciona más rápido que un ordenador".

No obstante, a veces el intérprete se considera un "diccionario ambulante" y, teniendo en cuenta la complejidad de la profesión y la necesidad inmediata de soluciones, las herramientas tecnológicas desempeñan aquí un papel importante.

Cada día nos encontramos con investigaciones innovadoras que requieren la elaboración de nuevos términos (neologismos), lo que, a su vez, requiere que el intérprete amplíe sus conocimientos todos los días.

Además, la cantidad de campos de especialidad a los que se tiene que enfrentar el intérprete también añaden más complejidad a la profesión. Un intérprete se puede encontrar con términos de multitud de campos y tiene que estar preparado para buscar un equivalente en poco tiempo (en caso de interpretación simultánea, cuenta con milisegundos).

Algunos argumentarán que el intérprete debe aprender a trabajar solamente con el sentido del mensaje como un todo, en vez de con los términos como elementos individuales, lo que significa que solo se debe centrar en la idea general en vez de reproducir literalmente lo que el orador original haya dicho. Cuando se traduce, sin embargo, en el caso de la traducción, la tarea es diferente: un traductor debe ser lo más fiel al texto original como sea posible.

No obstante, en campos especializados, la terminología es un componente esencial y en estos casos las herramientas terminológicas pueden ser prácticas y beneficiosas.

Con este trabajo abordamos la disciplina de la interpretación de manera innovadora con la esperanza de que se desarrollen nuevas herramientas tecnológicas y se mejoren las ya existentes, teniendo en cuenta las necesidades de la profesión. Estas herramientas abren un nuevo mundo de posibilidades para los intérpretes.

Por medio del estudio del conocimiento sobre herramientas y las necesidades de los intérpretes, el siguiente paso consistiría en mejorar las herramientas existentes y crear nuevas herramientas dirigidas a los intérpretes profesionales para facilitar su trabajo y proveerlos con la información necesaria antes (durante la fase de preparación) y durante un trabajo de interpretación.

Se han proporcionado en el trabajo varios ejemplos que demuestran que las herramientas tecnológicas pueden mejorar los resultados de una interpretación; por ejemplo, Pérez Pérez (2013) en su tesis doctoral demostró que el grupo de estudiantes que usaron programas de gestión de corpus para preparar la interpretación ofrecieron soluciones más acertadas que el grupo que extrajo la información manualmente de documentos; es decir, de la manera tradicional. A pesar de los beneficios de corpus para los intérpretes, solamente 22 de nuestros respondientes afirmar usar corpus durante la fase de preparación (4 de estos 22 respondientes también usan corpus durante una interpretación).

Creemos que el futuro de la interpretación radica en herramientas tecnológicas. La generación actual de intérpretes ya se beneficia de algunas herramientas que facilitan y mejoran enormemente su trabajo. Sin embargo, se debe llevar a cabo investigación y desarrollos adicionales para los futuros intérpretes.

Las futuras investigaciones podrían consistir en estudiar en profundidad el conocimiento y las necesidades de los intérpretes para mejorar las herramientas ya existentes y poder desarrollar herramientas nuevas.

Nuestra hipótesis afirmaba que mientras que los traductores cuentan con una gran cantidad de herramientas tecnológicas, los intérpretes no se benefician de estas herramientas al mismo nivel. Según nuestra encuesta, parece ser que nuestros respondientes desconocen las herramientas existentes dirigidas a los intérpretes, ya sea simultáneos, consecutivos, bilaterales, etc. También parece ser que las herramientas que sí usan no satisfacen completamente sus necesidades profesionales, debido al problema de la falta de tiempo, al cual siempre están enfrentados.

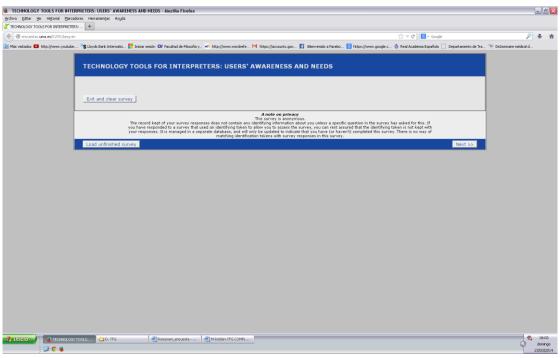
Líneas de investigación futuras deben centrarse en estudiar las necesidades de los intérpretes, teniendo en cuenta las dificultades con las que se suelen encontrar, y desarrollar herramientas lingüísticas adicionales y más favorables.

Este trabajo consistía en investigar sobre la posible aplicación de las tecnologías lingüísticas a la interpretación y, más concretamente, estudiar las necesidades tecnológicas de los intérpretes a través de una encuesta.

Lo consideramos nuestro aporte al mundo de la interpretación con la esperanza de que se tenga en cuenta y se mejoren y se desarrollen herramientas tecnológicas para los intérpretes, con el fin de facilitar la profesión y mejorar los resultados.



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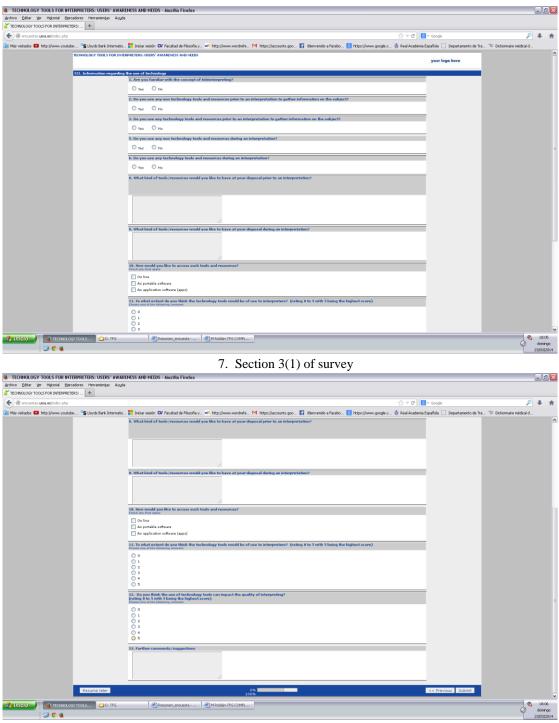
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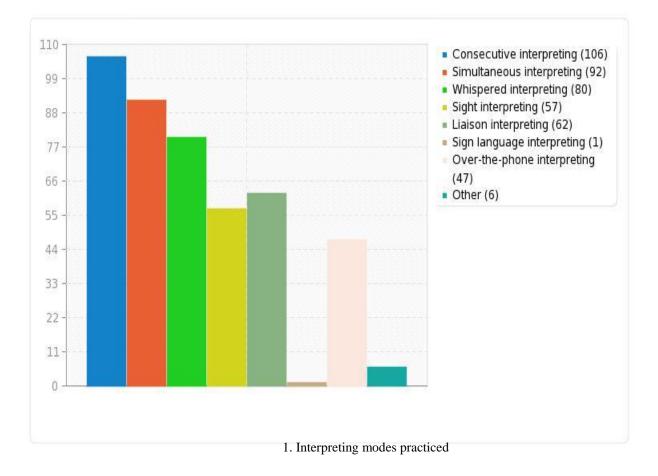
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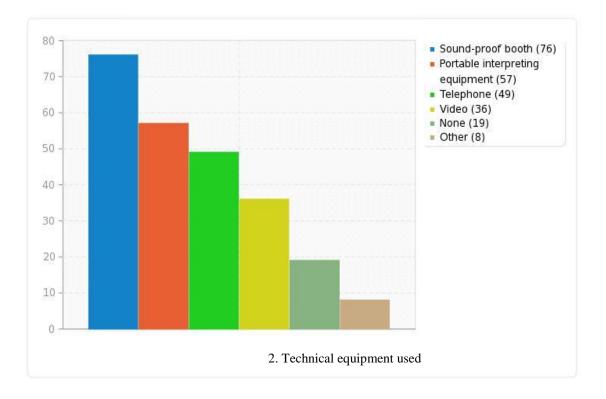
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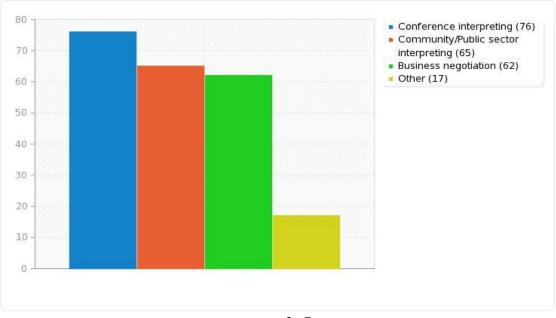
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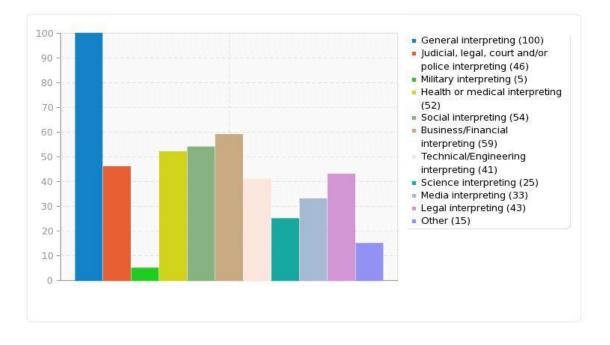
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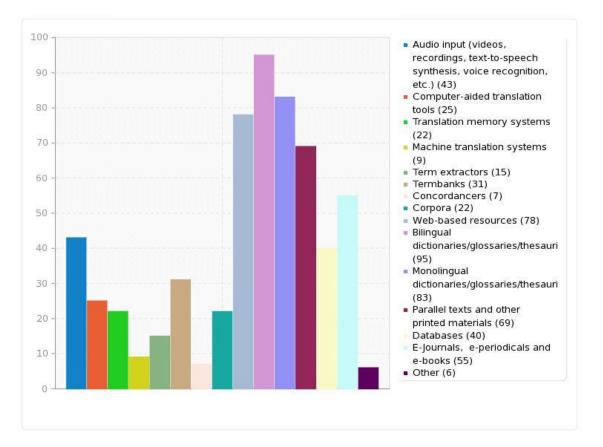








4. Field of expertise



5. Types of technology used (prior)

