



SIGNALED AND TESTED SKILLS IN THE RECRUITMENT PROCESSES OF TRANSLATORS IN PORTUGAL

João Carlos Antunes Brogueira

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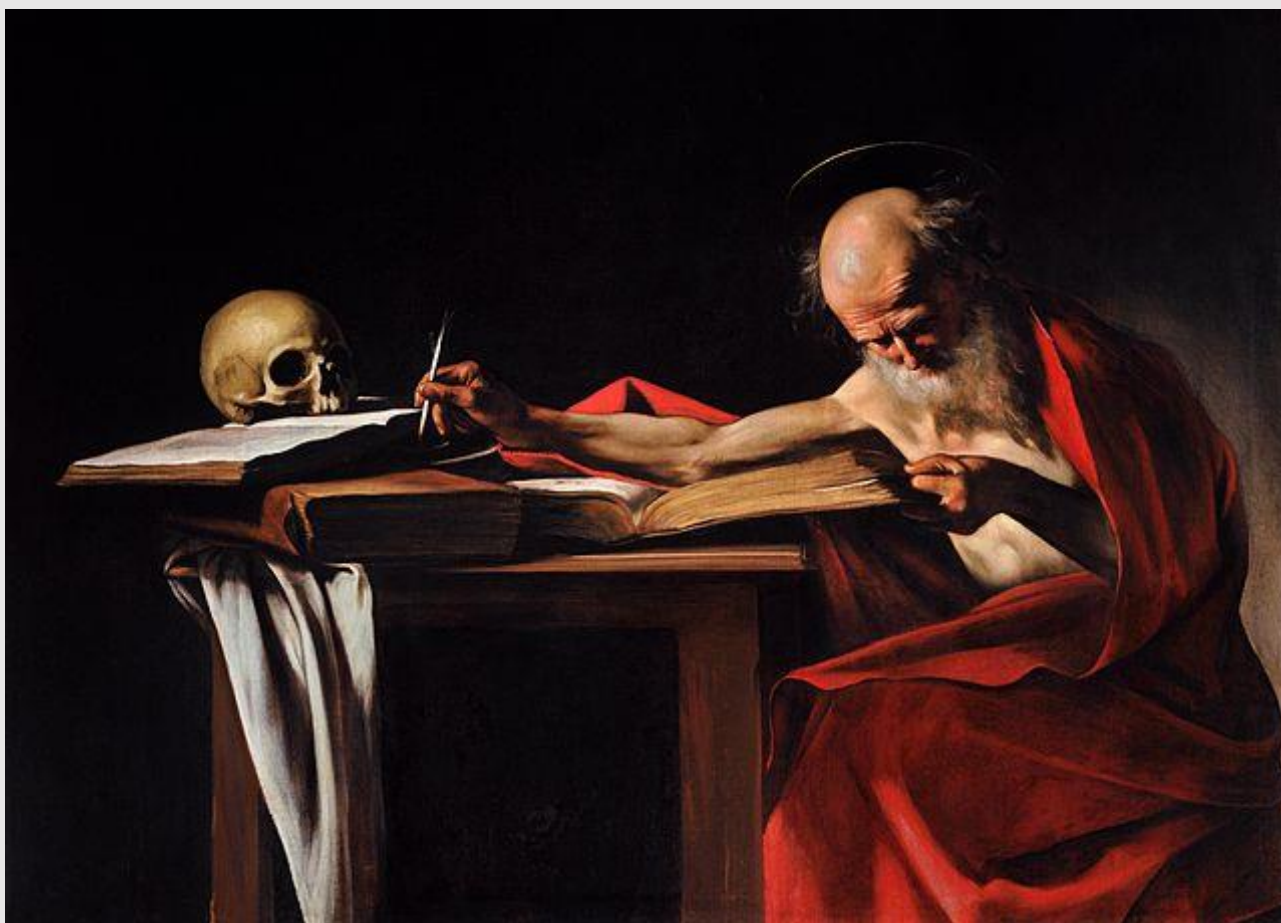
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Signaled and tested skills in the recruitment processes of translators in Portugal

JOÃO CARLOS ANTUNES BROGUEIRA



DOCTORAL THESIS
2022

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DOCTORAL THESIS

Supervised by Dr. Anthony Pym
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UNIVERSITAT ROVIRA i VIRGILI

Tarragona

2022



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I hereby certify that the present study *Signaled and tested skills in the recruitment processes of translators in Portugal*, presented by João Carlos Antunes Brogueira for the award of the degree of Doctor, has been carried out under my supervision at the Department of English and Germanic Studies of the Rovira and Virgili University and that it fulfills all the requirements for the award of Doctor.



Professor Anthony Pym
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“Ever tried. Ever failed. No matter. Try again. Fail again. Fail better.”

Samuel Becket, *Worstward Ho*

Abstract

This research aims at analyzing the methods used by translation companies and other organizations in their initial assessment of prospective translators. Little empirical evidence exists on how skills are signaled to and checked by employers in the translation industry. In theory, effective signals enable better communication and provide significant cost-savings.

Portugal is chosen here as a case study for the testing of those assumptions. This is firstly because the use of translation tests is particularly in evidence. But it is also because ample data are available on many aspects of the national context. Drawing on official sources, this study maps the translator training landscape in 2017 and identifies the skills being taught at the time. Official Portuguese and European statistics institutions are then used to trace out a profile of the translation industry in Portugal. A survey of 28 job advertisements is analyzed to establish the skills sought by employers. Based on this analysis and an EMT-based benchmark, a questionnaire survey of 14 translation companies operating in Portugal provides information on actual recruitment practices, specifically the skills that are signaled and tested. The questionnaire survey also gives information on training and skills gaps. Finally, interviews carried out in 2022 provide more detailed and diachronic insight into company practices and industry perspectives for the future.

The data collected from the higher education institutions are compared with the data from the companies to determine the extent to which translator-training institutions and translation companies are aligned. The findings indicate that universities globally prioritize the competences that translation companies also value. However, perhaps paradoxically, the results also strongly suggest that translation companies do not trust education as a signal of specific skills. Indeed, in-company testing occurs at the highest rates in the skills that carry the most weight in university programs, particularly language and production of translation, while signals with lower perceived values for the execution of translation work, such as intercultural or interpersonal competence, are the least tested by the companies.

Resumo

O presente estudo visa analisar os métodos utilizados por empresas de tradução e outras organizações na avaliação inicial de candidatos a tradutores. Existe pouca evidência empírica sobre a sinalização e verificação das competências no setor da tradução. Em teoria, sinais eficazes melhoram a comunicação e proporcionam uma significativa redução de custos.

Portugal é escolhido como caso de estudo para testar os pressupostos supramencionados. Em primeiro lugar, porque a utilização de testes de tradução é particularmente evidente, mas também porque existe uma abundância de dados relativos a vários aspetos do contexto nacional. Tendo por base dados de fontes oficiais, o presente estudo faz uma cartografia da formação de tradutores em 2017, identificando as competências lecionadas à data. Em seguida, é utilizada informação estatística oficial de instituições portuguesas e europeias para delinear o perfil do setor da tradução em Portugal. São analisados 28 anúncios de emprego para determinar as competências que os empregadores procuram. Com base nesta análise e num padrão de referência baseado no EMT, um questionário a 14 empresas de tradução em atividade em Portugal fornece informação sobre práticas de recrutamento concretas, mais especificamente sobre competências que são sinalizadas e testadas. O questionário também fornece informação em matéria de formação profissional e défices de competências. Por último, entrevistas realizadas em 2022 proporcionam informação mais detalhada e com uma dimensão diacrónica sobre as práticas das empresas e perspetivas para o futuro do setor.

Os dados recolhidos junto das instituições de ensino superior são comparados com os dados das empresas para determinar até que ponto as instituições e as empresas de tradução coincidem nos seus objetivos. Os resultados indicam que as universidades, em geral, dão prioridade às competências que as empresas de tradução também valorizam. Porventura paradoxalmente, os resultados também sugerem que as empresas de tradução não confiam no ensino como sinal de competências específicas. Com efeito, os testes realizados nas empresas registam maior incidência nas competências que também têm mais peso nos cursos universitários, em particular o domínio de línguas e produção de tradução, ao passo que sinais considerados de menor valor para a execução da tradução, como as competências intercultural ou interpessoal, são as menos testadas pelas empresas.

Resumen

El presente estudio analiza los métodos utilizados por las empresas de traducción y otras organizaciones para la evaluación inicial de los candidatos a traductores. Existen pocos datos empíricos sobre la señalización y verificación de las competencias en el sector de la traducción. En teoría, las señales eficaces mejoran la comunicación y proporcionan una significativa reducción en los costes de la contratación.

Se elige Portugal como estudio de caso para examinar dichas relaciones, en primer lugar porque la utilización de pruebas de traducción es particularmente evidente en dicho país, pero también porque existen abundantes datos relativos a varios aspectos del contexto nacional. Trabajando sobre la base de datos oficiales, el presente estudio hace una cartografía de la formación de traductores en 2017, identificando las competencias enseñadas en ese momento. A continuación, se utiliza información estadística oficial de instituciones portuguesas y europeas para delinear el perfil del sector de la traducción. Además, se analizan 28 anuncios de empleo para determinar las competencias que buscan los empleadores. En base de este análisis y utilizando un patrón de referencia basado en el Máster Europeo de Traducción, una encuesta a 14 empresas de traducción que operan en Portugal proporciona información sobre las prácticas de reclutamiento concretas, específicamente sobre las competencias que son señalizadas y las que son comprobadas por las empresas. La encuesta también da información sobre la formación profesional y las percibidas faltas de competencias. Por último, una serie de entrevistas realizadas en 2022 proporciona información más detallada y aporta una dimensión diacrónica sobre las prácticas de las empresas y perspectivas para el futuro del sector.

Los datos recogidos de las instituciones de enseñanza superior son comparados con los datos sobre las empresas para determinar hasta qué punto las instituciones y las empresas de traducción coinciden en sus objetivos. Los resultados indican que las universidades dan prioridad a las competencias que las empresas de traducción también valoran. Sin embargo, los resultados también sugieren que las empresas de traducción no confían en la formación universitaria como señal de competencias específicas. En efecto, las pruebas realizadas en las empresas registran una mayor incidencia en las competencias que también tienen más peso en las carreras universitarias, en particular el conocimiento de idiomas y la producción de traducción, mientras que señales consideradas de menor valor para la ejecución de la traducción son las menos verificadas por las empresas.

Resum

Aquest estudi analitza els mètodes utilitzats per les empreses de traducció i altres organitzacions per a l'avaluació inicial dels candidats a traductors. Hi ha poques dades empíriques sobre la senyalització i verificació de les competències en el sector de la traducció. En teoria, els senyals eficaços milloren la comunicació i proporcionen una significativa reducció en els costos de la contractació.

Portugal s'escull com a estudi de cas per examinar aquestes relacions, en primer lloc perquè la utilització de proves de traducció és particularment evident en aquest país, però també perquè hi ha abundants dades relatives a diversos aspectes del context nacional. Treballant sobre la base de dades oficials, aquest estudi dibuixa una cartografia de la formació de traductors el 2017, identificant les competències ensenyades en aquell moment. A continuació, es fa servir informació estadística oficial d'institucions portugueses i europees per delinear el perfil del sector de la traducció. A més, s'analitzen 28 anuncis de feina per determinar les competències que busquen les empreses. En base d'aquesta anàlisi i utilitzant un patró de referència basat en el Màster Europeu de Traducció, una enquesta a 14 empreses de traducció que operen a Portugal proporciona informació sobre les seves pràctiques de reclutament concretes, específicament sobre les competències que són senyalitzades i les que són comprovades per les empreses. L'enquesta també proporciona informació sobre les opinions dels empresaris respecte a la formació professional i a les faltes de competències percebudes. Per acabar, una sèrie d'entrevistes realitzades el 2022 proporciona informació més detallada i aporta una dimensió diacrònica sobre les pràctiques de les empreses i perspectives per al sector.

Les dades recollides de les institucions d'ensenyament superior són comparades amb les dades sobre les empreses per determinar fins a quin punt les institucions i empreses de traducció coincideixen en els seus objectius. Els resultats indiquen que les universitats donen prioritat a les competències que les empreses de traducció també valoren. Tanmateix, els resultats també suggereixen que les empreses de traducció no confien en la formació universitària com a senyal de competències específiques. En efecte, les proves realitzades a les empreses registren una major incidència en les competències que també tenen més pes a les carreres universitàries, en particular el coneixement d'idiomes i la producció de traducció, mentre que les competències considerades de menor valor per a l'execució de la traducció són les menys verificades per les empreses.

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Mano Miguel, agora é a tua vez.

À inspiração da minha mãe e à memória do meu pai dedico as páginas que se seguem.

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List of Abbreviations

- APET – Associação Portuguesa de Empresas de Tradução (Portuguese Association of Translation Companies)
- CAE – Código de atividade económica (Code of economic activity)
- CAT – Computer-assisted translation
- CEFR - Common European Framework of Reference for Languages
- DGEEC –Direção-Geral de Estatísticas da Educação e Ciência (Directorate General for Statistics in Education and Science in Portugal)
- ECTS – European Credit Transfer System
- ELIA – European Language Industry Association
- ELIS – European Language Industry Survey
- EMT – European Master's in Translation
- EU – European Union
- EUATC – European Union Association of Translation Companies
- FIT – Fédération Internationale des Traducteurs (International Federation of Translators)
- GALA – Globalization and Localization Association
- IGO – Intergovernmental organization
- INE – Instituto Nacional de Estatística/Statistics Portugal
- LIND – Language Industry Expert Group
- LSP – Language Service Provider
- MLV – Multi Language Vendor
- MT – Machine Translation
- NACE – Nomenclature statistique des activités économiques dans la Communauté européenne (Statistical classification of economic activities in the European Community)
- OECD - Organisation for Economic Co-operation and Development
- SLV – Single Language Vendor
- SME – Small and Medium Enterprise

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Chapter 1. Introduction

Recruitment tests and shady business practices are recurring topics in Portuguese translator fora. The two topics are often closely tied, with translators discussing the length of the tests, whether to take them or not, and whether the tests should be paid work. It is not unusual to hear translators complain about taking tests and never hearing back from the prospective client, and occasionally an anecdotal account will arise of multiple translators being contacted to do different parts of a document, for free, under the guise of a test.

Recruitment tests might thus have a poor reputation among translators, yet they are widely used across the translation industry, regardless of the size of the organization looking for prospective translators. They are also a prominent feature in the recruitment process for public agencies and international organizations. The United Nations competitive examinations are famously difficult and long, and the whole recruitment process can take several months to complete.

In a recruitment process for a translation company, the employer and prospective employee have different degrees of knowledge about the prospective employee's abilities. This information asymmetry (Spence, 1973) means that the employer will usually try to gather as much relevant information as possible before hiring the translator, be it for a project or to work in-house. In a sector made up mostly of very small companies, as is the case in Portugal, choosing the wrong person may result in significant costs.

Employers therefore try to obtain as much information as possible about the applicant using signals like CVs, references or diplomas. Tests are also a prevailing practice across the translation sector as a tool to gather information about the abilities of the translator, reducing the risk of misrepresentation. But tests are also used to verify skills that are otherwise signaled by exam results and diplomas. The existence of such tests thus suggests an element of distrust not just between employers and prospective employees, but also between employers and translator training institutions that issue diplomas. Why should there exist such apparent distrust?

This is the problem that I am to investigate here, taking Portugal as a major test case.

1.1 Motivation

The translation industry has changed significantly over the last decades in post-industrial economies. Globalization has accelerated the need for translation services, not only for communication but also for marketing products and services abroad. Technology, in turn, has not only accelerated translation, but has also enabled the translation and localization of all sorts of contents and formats.

In tandem with the market, academic institutions have sought to adapt to this strong demand for qualified professionals. In little over two decades, translator training has changed remarkably in Portugal. This change was accelerated with the implementation of the Bologna Process from 1992, establishing a common framework for higher-education qualifications. State universities, in particular, advanced from their old model of a broadband Bachelor's degree in Linguistics or Modern Languages, followed by post-graduate specializations in Translation or Didactics, and established Bachelor's, Master's and even doctoral degrees in Translation Studies. Bologna also brought about greater interaction between universities and the job market, with most programs at BA or MA level now including the option of an internship at a private company or a public institution.

Having witnessed many of these changes first-hand, both as a translation trainer working at university level and a professional translator on the Portuguese market, my main motivation for this study stems from the great divide that seems to persist between the professional practice and the training of qualified professionals in Portugal, and how it affects education as a signal in recruitment processes. In his doctoral thesis, Chan had already concluded that professional certification in translation “does not give a strong signal regarding the suitability of applicants” (2009b, p. 178). Academic degrees were found to be respectable signals, although vulnerable to the oversupply of translators emerging from the proliferation of programs in translator training institutions. In Portugal there are no officially recognized professional certification mechanisms for translators and the pervasive use of recruitment tests suggests that education may not be very strong as a signal either.

Many liberal professions are regulated in Portugal. By law, people wishing to enter those professions must have a specific degree and be members of a professional association. Some of these professional associations, like medical doctors or lawyers, have strict entry requirements, including admission exams, whereas other professional associations, like architects, only require a graduate diploma from a recognized tertiary

institution. In either case, this creates strong barriers to entry, restricting the pool of available job candidates. Near the other end of the spectrum, it seems, translation as a profession and the translation market are almost entirely deregulated, meaning that any person can be called a translator.

Recruiting organizations are thus forced to navigate several signals from potential candidates in order to find the best fit for the job or project at hand. CVs, professional experience, certification, being a member of an association and recommendations are some examples of signals. In this study, I seek to find out which signals organizations pay attention to during recruitment processes, how they rank these signals and, specifically, if they trust higher education as a signal.

As mentioned, Portugal is taken as a case study. This is for obvious personal reasons since it is the country where I live and where I work as a translator and a translator trainer. But Portugal is also a relatively small country and small market, enabling the creation of relatively complete data sets. And multiple high-quality statistical data sources are readily available for research.

Portugal is not certainly representative of all economies, but as a case study it enables testing of concepts and methods that can be replicated across similar markets.

1.2 Aims and objectives

This study focuses on the translation ecosystem and on education as a signal, with specific emphasis on translation companies as the largest employers of translators in Portugal. The research questions are as follows:

- 1 What signals do recruiters look for in prospective translators?
- 2 Which signals are trusted, and which are not trusted and thus replaced with tests?
- 3 Are some skills more tested than others?

Signals are at the core of this research project, but they are context-dependent. For a better understanding of the Portuguese context, this project sets out to map the translator-training landscape and the translation industry. In contrast with previous studies in this area, I incorporate high-quality statistical data from multiple sources with long series over time.

In order to address my first research question, I seek to determine the methods used in the assessment of prospective translators. Using a questionnaire and then interviews, I

ask how translation companies in Portugal interact with signals from prospective collaborators for a hiring decision under conditions of uncertainty.

By collecting data on training provided by companies to translators, I also aim to determine potential gaps in skills. Technology is looked into in greater detail, because it has gained significant relevance in the translation industry and it has become a feature of translator-training programs in higher education. Indeed, of all skills, technology is arguably the one that ages the fastest, and clients, especially large ones, are also known for employing proprietary tools that are not available to anyone outside a restricted environment. Moreover, machine translation is increasingly being used successfully, indicating a potential shift in skills and competences required from translators. At this moment in time, technology has the potential to fundamentally disrupt the sector.

Globally, I hope to obtain empirically-grounded results that enable a better understanding of the recruitment dynamics in the translation industry. Such results have the potential to inform trainers and employers of translators, and to promote an alignment of interests. In other words, I aim to contribute to bridge the gap that motivated this study.

1.3 Structure

This thesis is structured in six chapters.

Chapter two contains a review of previous studies on information asymmetry and signaling in the job market, translator training and the translation industry in Portugal, and translator competences, once again focusing mainly on Portugal.

Chapter three presents the methodology. After introducing the research questions, the hypotheses, definitions and operationalization of variables, I present the mixed-methods approach used in the study to collect and integrate quantitative and qualitative data. I describe the specific methodological approach to the collection of individual sets of data, namely 1) the translator-training landscape, 2) the translation industry, 3) the assessment of prospective translators (including the survey of ads and the survey questionnaire), and 4) the interviews with stakeholders regarding recruitment processes. All four sections describe both the data sources and the tools used for collection and analysis.

Chapter four contains the results. It is also structured in four large sections. The first three sections contain the quantitative results obtained from official sources and the

surveys. The fourth section contains the qualitative results obtained from the interviews. The interview results are grouped in small, large and global language service providers.

Chapter five discusses the results. It starts by testing the hypotheses and then discusses the signaling mechanisms in ads and in recruitment procedures. The discussion then focuses on education as a signal and on specific features of the Portuguese market. In the discussion, the qualitative data from the interviews are related to quantitative results.

Chapter six contains the conclusions. It summarizes the findings, discusses how they may be applied and presents some contributions to the field arising from the thesis. Finally, it lists some of the limitations of the study, as well as avenues for future research.

A list of references and the appendices form the final sections of this thesis.

Chapter 2. Literature review

In the following section I present a survey of previous studies that are pertinent for my topic. I begin by looking at studies addressing the sociological dimension of the profession of translator in Portugal. I also review the aspect of very limited regulation of the profession and translation in Portugal. Next, I review studies that have been produced about the translation industry in Portugal.

Then I look into the studies in the field of translator training in Portugal, followed by a review of the literature on translator competences with an emphasis on the Portuguese educational system. The next section of the literature review discusses studies that frame training for the markets.

The final section of the literature review presents studies of the market as a system of signals that can help lay a methodological framework for this study.

2.1. The profession in Portugal

Empirical studies about the profession are scarce and relatively little has been written on the topic of translator training and the profession in Portugal. To be fair, very little has been written in Portugal on the topic of translation in general, and most of the literature comes from an academic setting.

There are currently no regular publications by translator or translation company associations. The few publications that exist or have existed are usually short-lived. The now defunct *Jornal da APT*, published by Associação Portuguesa de Tradutores (APT), used to contain information for the members of the association, news and other materials of interest for translators, as well as book and journal reviews. *Confluências*, a semi-annual journal of specialized translation, totaled four issues in the mid-2000s. *MagazinePhilos*, still running, is sponsored by the translation company Philos, and publishes a combination of articles about the world of professional translation, photography and travelling. The panorama for periodicals is dire in Portugal. The funding is scarce, and the periodicals are usually born out of the initiative of one person or a small group of people who eventually lose interest in the project or life steps in.

Nevertheless, it should be noted that the number of documents archived in the Scientific Open Access Repository of Portugal (RCAAP) containing the keywords

“translation” or “tradução” has been steadily rising since the early 2000s, with a noticeable jump post-2010. This happened at a time when the first Bologna graduates were finishing their Bachelor’s and Master’s cycles, most of which included mandatory research work in some form.

Two research projects, by Francisco José Magalhães (1996) and Fernando Ferreira-Alves (2011) respectively, stand out for their breadth and contribution to the mapping of the profession and the market of translation in Portugal.

The first sociological study into the profession in Portugal was carried out by Francisco José Magalhães (1996). Magalhães provided a detailed report on the translation market (I), the translator’s professional activity (II) and translator training (III). Parts I and III are particularly rich in data. Part I also includes extensive sections comparing sectors and countries, as well an attempt to estimate the total size of some market segments using direct and indirect indicators. Part II is devoted to the translator’s professional activity. Using a case-study approach, Magalhães attempts to depict the variety of work facing translators. However, in this section of the book, the tone is unusually opinionated, and the sources of data are secondary at best. Part III presents an overview of translator training in Portugal, which encompasses not only the higher-education institutions but also secondary schools and language institutes.

The other significant mapping of the translation market in Portugal was provided by Ferreira-Alves (2011). In the form of a doctoral thesis, Ferreira-Alves presented a detailed report on the Portuguese translator market within the globalized language services industry and reflected on whether a professional identity exists among freelance translators. Chapter III, on the markets and the economics of language, discusses many of the complications found while analyzing the translation market using official statistical data, which in turn make company characterization more complex. Still, making extensive use of significantly improved data sources such as Statistics Portugal (INE, Instituto Nacional de Estatística) and Pordata, which are now more readily available online, Ferreira-Alves was able to highlight certain features of language service providers and their distribution across the territory.

Companies overwhelmingly have fewer than 10 employees (on average, companies employ little over 1 person), and approximately 80 percent of the turnover is generated in the regions of Greater Lisbon and Greater Oporto. This represents a highly fragmented market where a high number of companies are actually one-person operations, but highly concentrated in terms of revenue and geography. Gouadec (2002, p. 108) uses

the term “pseudo-company” to refer to such one-person operations. Two dimensions of this term are particularly applicable to the Portuguese market: an individual translator hiding under a corporate name or companies engaged mostly in subcontracting work and living off the commissions that they extract from every project. A survey included in the study also found that more than half of the respondents translate on a part-time basis. The results suggest a fragile industry, where most companies hardly pursue any of the collective aims typically associated with a company and the professionals are not fully committed to their profession as translators, either because they are not able to earn enough for a living as translators or because they use translation as a way to earn extra income.

In previous research conducted in 2005, Ferreira-Alves had already hinted at the prevailing lightweight structure of translation companies in Portugal. Ferreira-Alves concluded that companies “are generally small in size and are run by a few people, often linked by family ties” (2012, p. 237). These companies employ a permanent staff between two and ten, most of whom have linguistic as well as managerial and administrative tasks. Production is handled in part by in-house staff, but also by freelancers. In-house staff are responsible for quality control. Outsourcing is a prevailing practice.

According to Ferreira-Alves’ study, translators and revisers are the bulk of in-house staff on permanent contract, followed by project managers and technical support personnel. As far as outsourcing is concerned, freelancers and other companies are frequently used, as are linguistic and technical revisers, and technical support personnel. Companies keep a small core team and outsource production peaks, as well as non-core tasks. They also resort to freelancers to take advantage of a more flexible labor framework than that which governs contracts.

Surveyed companies reported translating mostly into Portuguese, but Ferreira-Alves revealed that translating into other languages is quite frequent. These companies translate mostly in technical domains such as Informatics, Economics, or Engineering, and the most common language combinations involve Portuguese and European languages. Legal translation and certification of translations are also frequent services, and some companies also handle interpreting assignments and ancillary tasks, such as software engineering and transcription.

Linguistic, writing, and translation skills were cited as the most relevant by the companies when selecting future translators. Research skills, cultural knowledge and

capacity for self-criticism were also mentioned as positive features in candidates, as well as specialized knowledge, and taste for translation.

The strategies used by companies to find collaborators include analyzing CVs sent by applicants, recommendations from other translators, recruiting from universities and the Internet. Testing is a commonly used tool to assess the quality of output and the ability to solve problems.

Experience is highly valued, as is knowledge of translation software. A university degree in translation or other specialized fields such as Medicine or Engineering is considered very important. Other skills acquired during academic training are also valued.

Quality is ensured at the core by translators and reviewers, and in some companies the project manager and the company manager also play a role in the quality process.

The surveyed companies frequently outsource work. This is a common practice because companies do not always have the necessary qualified staff in-house, as they are small and the market demand in certain areas and/or language combinations does not justify hiring dedicated resources. Work performed by external translators is reviewed internally.

Companies reported providing some project-specific support to freelancers in the form of glossaries or even software that is necessary for particular projects. Most of the work is carried out for privately-owned companies and international clients are preferred.

The final section of the report by Ferreira-Alves dealt with skills. Companies reported gaps in skills and mentioned the need to train newly-graduated translators in basic professional and technical skills. As regards relevant skills for the future, linguistic and translation competence rise above all others, followed by professional and technical skills. Professional, social and technological skills come next, and quality and project management close the list of highly desirable features. This skill set points towards a more flexible professional profile, someone who is able to combine a linguistic role with managerial or quality tasks, and also a team player.

2.2. Regulation in Portugal

Translation in Portugal is notoriously non-regulated. A factsheet on the translation profession in Portugal (Pym et al., 2012a) published on the site of the European Society for Translation Studies is significant as regards the current, formal requirements to work as a professional translator in this country: no academic qualifications, professional

certification or association membership are required.¹ Not even translators working in legal settings are certified. To work in a court setting, translators are required to swear in front of the judge or staff, and for most written translations requiring certification, the translation is certified by notary, lawyer or chamber of commerce, not by the translator.

Not surprisingly, Portugal was found to rank among the countries with below-average score for how it regulates the profession of legal translator in a recent report titled *The Status of the Translation Profession* (Pym et al., 2012b) funded by the European Commission's Directorate-General for Translation, citing data from the survey *Status Quaestionis* (Hertog & van Gucht, 2008). The report does not go in-depth into the specific situation of Portugal, and it stresses doubts regarding the quality of the data available and complications regarding the segregation of data items. If anything, it suggests lack of reliable data for more detailed analysis.

In his Master's thesis about the translation market and the needs of large companies when buying translations, Cristóvão Soares (2012) looks into the structure of the market and assesses the need for regulation by the state or industry associations. Soares' research is particularly innovative in that it uses tools and methodologies from Economics to analyze the translation market. The author puts forward a number of suggestions for regulating the translation market, namely though State intervention to correct the imbalances of a non-regulated industry. The suggestions include the creation of a professional association with power to regulate the profession – along the lines of a bar association for lawyers –, the creation of a professional certification program and the merger of the existing professional/industry associations for enhanced representativeness. However, there seems to be little political will to change.

This is clearly seen in an article authored by Patrícia Jerónimo (2013) on the transposition to Portuguese law of Directive 2010/64/EU on the right to interpreting and translation in criminal proceedings. The author found that this process failed to produce any changes specifically regarding the qualifications and/or certification required to provide adequate linguistic assistance in criminal proceedings. The directive is remarkably vague in this regard, stating in article 5 that “Member States shall endeavor to establish a register or registers of independent translators and interpreters who are appropriately qualified”. This allows the Member States great leeway in setting the

¹ http://www.est-translationstudies.org/research/2011_DGT/factsheets/PORTUGAL.pdf

qualifications required for inclusion in such a register. According to Jerónimo, Portugal did not make any changes to its legal system in light of the directive, stating that the national legislation already provided the mechanisms for safeguarding the rights of accused. While formally agreeing with the argument of the Portuguese authorities, Jerónimo goes on to list a number of flaws in the system that prevent the guarantee of adequate quality in linguistic assistance. Jerónimo ultimately argues in favor of the regulation of the professional status of sworn translators and interpreters, basing her reason on the preliminary decree-law draft prepared previously by a workgroup on sworn translation and interpreting (Decreto-Lei sobre Tradução Ajuramentada e Interpretação Ajuramentada, TAIA). It should be noted that this preliminary decree-law draft had been abandoned at an early stage.

Translation is only regulated at consumer-level, namely by Law 29/81, and Decree-Laws 238/86 (as amended by Decree-Law 42/88) and 62/88. These pieces of legislation stipulate that certain elements of product tags or documentation must be translated into Portuguese, otherwise products cannot be in the market. Individual market regulators in sensitive industries also have the power to establish certain obligations as regards the translation of labels or documentation. The national medicines agency (Infarmed) and the securities commission (CMVM) are two examples.

2.3. Overview of the industry

The yearly language services market report by Common Sense Advisory estimated in June 2016 that the language industry would top US\$40 billion in revenue by the end of that same year (DePalma et al., 2016). Common Sense Advisory has received criticism before for their optimistic data and linear growth rates (Pym et al., 2012b, p. 140; Soares, 2012, p. 47), but there is shortage of research for contrast. A previous study on the size of the language industry in the European Union (Rinsche & Portera-Zanotti, 2009) had estimated a value of €8.4 billion for the language industry in the EU in 2009. This figure comprises items that are not included in the Common Sense Advisory, such as language teaching and organization of international conferences with multilingual requirements. Still, this study projected a minimum annual compounded growth rate of 10 percent, resulting in a conservative estimate of total market value of €16.5 billion by 2015 (or above €20 billion in a less conservative estimate). The authors of the EU report cite a

study published in 2008 by Beninato and DiPalma (issued by Common Sense Advisory) to establish a 43 percent global market share of European language services.

Rinsche and Portera-Zanotti (2009) estimate the total turnover of translation and interpreting activities in Portugal at €31.3 million for 2008. For this estimate they used the old Economic Activity Classification code 74.82 (secretarial and translation activities) and then applied the proportions used by the French Institute of Statistics and Economic Studies to determine the proportion of translation and interpreting activities. However, Statistics Portugal, the national statistics agency, has since adopted CAE Rev. 3 which matches NACE Rev. 2, the statistical classification of economic activities in the European Community. Under CAE Rev. 3, Translation and Interpreting services have a specific code (74300), which yields much more accurate figures for the industry. Statistics Portugal recorded €47.1 million for actual turnover of translation and interpreting activities in 2008, a figure approximately 50 percent higher than estimated by the authors. There is also a significant discrepancy in the number of persons employed for 2006: 1462 vs 2565. The latter is the figure disclosed by Statistics Portugal.

It is also worth noting that the estimates were excessively optimistic. According to Rinsche and Portera-Zanotti, translation and interpreting activities in Portugal accounted for 0.37 percent of the European language industry in 2008. Assuming the same proportion of the industry for the 2015 estimate (€16.5 billion), that would mean a total turnover of translation and interpreting activities of €61.1 million. However, the total turnover recorded by Statistics Portugal is just short of €54 million. The industry has no doubt been affected by the economic and financial crisis that hit Portugal and Europe over the last few years. Growth stalled in the industry from 2011 until 2013, having picked up again in 2014.

Estimating the total number of translators in the world is not an easy task. In sharp contrast with the 2008 estimate of 700 000 translators by Common Sense Advisory, the report on the status of the translation profession (Pym et al., 2012b) estimates a total of 333 000 translators and interpreters around the world. This number is put forward with care and the computation methodology is based on an extrapolation of data available for countries that give census data for translators and interpreters. The proportion of freelance workers (self-employed) at European level reaches 74 percent, and approximately 60 percent are part-time workers.

The data available for Portugal, compiled by Ferreira-Alves (2011) based on a survey, show similar trends for Northern Portugal: 54.7 percent of respondents state that

translation is either a part-time or secondary activity. Statistics Portugal provides census data for translators and interpreters as a specific category since the implementation of CAE Rev. 3 (code 74300, Translation and Interpreting services) in 2007. At the start of this research project, the latest data available at Statistics Portugal recorded 3062 enterprises and 3575 persons employed in such enterprises in 2015². This number includes both freelancers (2815), termed individual enterprises by Statistics Portugal, and companies (247). Individual enterprises account for 92 percent of the total enterprises. The number of enterprises has grown since this original data collection.

If anything, the data available show such wide variations that the information should be taken with caution. The fact that Common Sense Advisory models underlie other sources also needs to be taken into account.

The European Language Industry Association (ELIA), alongside other industry and expert associations (EMT, EUATC, FIT Europe, GALA, and LIND), also publishes a report on the expectations and concerns of the European language industry. This report is designed to collect data on the overall mood of the sector by covering different segments. The report is compiled based on the answers collected in the European Language Industry Survey (ELIS), an initiative that started in 2013 and is open to language service companies, independent language professionals, training and language technology providers, language service buyers, private and public translation departments.

I will review in detail the 2019 edition, the latest for which comparable data have also been released by Eurostat. The survey is run every year during the first quarter. It was the last to be published before the COVID-19 pandemic, and therefore the most revealing of stable trends in recent years.

In the 2019 edition of the report (ELIA et al., 2019), most language service companies are in the category of small enterprises. Compared to previous editions of the report, larger companies (revenue above €250 000) gained in weight, in particular companies with revenue over one million euros. A similar trend was reported for the number of companies represented having more than ten employees, which is growing, and less than ten employees, which is becoming smaller.

² Enterprise is defined by Statistics Portugal in their metadata as “Legal entity (natural or legal person) that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations.”. <http://smi.ine.pt/Conceito/Detalhes/4456> (visited 20 June 2017).

The dominant business activity of respondents in the ELIS report is Translation. The main clients in the industry come from the legal, government, industry, media, and finance. This is roughly similar for companies of all sizes and independent professionals.

Inquired about client expectations, the top three responses for both companies and independent professionals are quality of service, responsiveness and quality of deliverables. Low cost and proximity rank very low.

The report highlights substantial differences regarding plans for the adoption or increased use of machine translation (MT). Over 80% of companies have plans to use MT, whereas little over 30% of independent professionals state their intention to do so. Process automation and remote working also rank highly and the plans of companies.

Companies and independent professionals were asked about their collaboration with each other, namely to rate the elements of a successful business relationship. Respondents provided input regarding the overall importance of each item and the actual satisfaction with that item. Companies rated reliability and responsiveness as the most important items, but all items rank highly except for administration and support. Satisfaction ratings show a homogeneous distribution across all these items. Independent professionals rated reliability and professionalism as the most important items, but all items rank highly except for administration and support. Satisfaction ratings show a homogeneous distribution across all these items, except for quality of materials, where satisfaction dips.

Companies expressed some dissatisfaction with the quality provided by independent professionals and adherence to project instructions. Companies also mentioned the independent professionals should invest in training to keep up to speed with the industry and the latest developments. At the other end of the collaboration, independent professionals complain about planning and financial issues, inadequate tools and dehumanization of processes, which is affecting communication. Project management is singled out as a problem area, in particular for lack of support or consideration of individual characteristics.

Regarding the evolution of the market, companies reported an increase in competition and sales, and they expect further increases in activity. Independent language professionals, conversely, reported “significantly lower growth in sales/revenues” (ELIA et al., 2019, p. 14) and are pessimistic for the future.

Companies reported an increase in recruitment in 2018, and the expectations for 2019 is that the trend will continue. Certification requirements have continued to increase

but at a slower pace. Security requirements for companies have grown strongly and they are expected to increase.

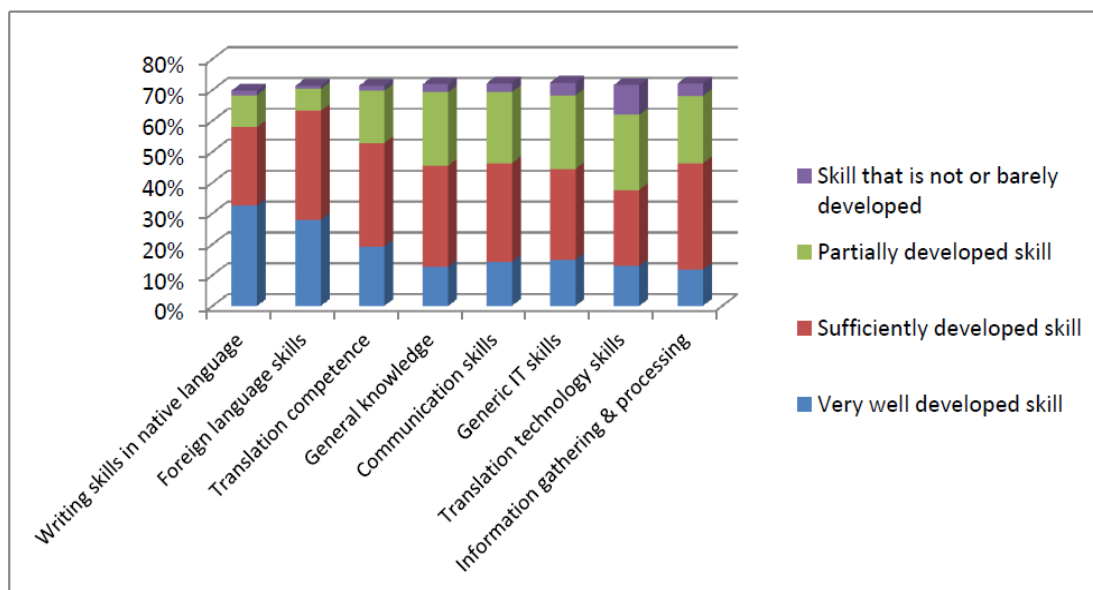
The technology section of the report highlights different expectations for companies and independent professionals. Independent professionals value ease of use and cost of ownership, whereas companies privilege integration, cost of ownership and MT quality. Larger companies rank integration and MT quality higher than smaller companies.

Investment plans in technology also vary considerably between independent professionals and companies. More than 60% of companies plan investments in MT, followed by automation of workflows. Independent professionals have plans to invest mainly in CAT tools, followed by MT (16%). Larger companies plan to invest proportionally more in MT and workflow automation than smaller companies.

Nevertheless, data on familiarity and usage of tools suggest that MT is still not commonplace in professional translation practice. Companies report using such tools more frequently than independent professionals.

The ELIA report contains a section about the skills of new graduates from Master's programs. Respondents were asked to rate graduates on a number of skills. Figure 1, taken from the ELIA report, shows how respondents evaluated the skills. New MA graduates score highly on linguistic skills and sub-optimally in IT and translation technology tools.

Figure 1. Skills of new master-level graduates



The next section of the report, a new addition, is related to internships and it shows a high level of satisfaction of companies with internships. I should highlight that around 40% of respondents have stated that they regularly hire or contract former interns, and more than 50% of respondents are willing to continue or further develop internships in the future. Regarding the added value of internships for the company, I would stress that companies in Portugal largely consider that internships bring added value to the company and are willing to continue and develop internships.

Still within the scope of higher education, the ELIA report signals that companies are increasingly aware of the European Master's in Translation (MT) label but only a small fraction of companies take it into account in their recruitment procedures.

Regarding training or professional development, technology, subject matter specialization and soft skills are the most popular categories for independent professionals, whereas companies elect technology, sales and marketing, post-editing and management as key areas for training their staff.

The final section of the report has two forward-looking sections: challenges and trends. Companies reported pricing and managerial challenges as the most significant, whereas skill gaps and government regulations are the weakest challenges facing companies. Independent professionals reported concerns with competition and price pressure, and limited concerns with financial management, administration, technology, and training.

As far as trends are concerned, companies are seen as optimistic regarding MT (30%), other technologies and demand increase. Among the negative trends, price pressure, MT (20%), and competition are the top three. The report highlights a shift in MT optimism, as it is mentioned as a net positive trend for the first time.

Independent professionals highlight demand increase, technologies excluding MT, and MT as the positive trends. Among the negative trends, price pressure, MT, and competition are the top three. I should note that the levels of optimism regarding the top positive trends are overall significantly lower than those shown by companies. This suggests that independent professionals are less positive about the future than companies.

Figure 2, taken from the ELIA report, shows how companies and language professionals rate the availability of information on different topics. Language information and language technology rank the highest, whereas market data, competition and training rank the lowest. There is no significant difference between companies and language professionals, except for the availability of information on the topic of standards.

Figure 2. Availability of information



2.4. Translator training in Portugal

The offer of translator training is currently wide in Portugal, which is also a signal of significant interest in this particular training and in the profession. According to Magalhães (1996), the pioneering institution in Portugal is Instituto de Línguas e Administração, founded 1962 with the aim of providing training for administrative staff.

In the mid-1990s, at secondary school level, students in the Humanities tracks had the option of taking “Técnicas de Tradução”, where they would develop basic translation skills. At first cycle level in higher education, Magalhães lists translation programs in six private higher education institutions, most of which have translation combined with another specialism, like interpreting or secretarial work. In the public sector, the author found four post-graduate specialization programs in translation, which students could take after finishing their four or five-year degree (“Licenciatura”). Only Universidade Nova de Lisboa offered a translation track for students in the Modern Languages programs. The other program in translation and interpreting, at “Licenciatura” level, was taught at the University of Macau (at that time, a Portuguese territory). At the polytechnic institutes, the programs were usually shorter (three years) and awarded the degree of “Bacharel”. Magalhães lists two programs running at Instituto Politécnico do Porto and Instituto Politécnico de Macau. He adds a footnote mentioning that Instituto Politécnico de Leiria and Instituto Politécnico de Castelo Branco were starting programs in translation. In total, Magalhães lists 22 programs. He lists further six language institutes which offer courses for the training of translators.

According to Magalhães (apud Ferreira-Alves 2011, p. 252) 400 new translators finished their studies at universities or translation schools and entering the job market in 1997. Total market demand was situated at around 1500-2000 translators.

In the late 1990s, first-cycle programs would usually last three to five years, sometimes followed by another two for second-cycle post-graduate programs. Even though this number of new translators is supposed to include language schools, it would seem too high considering the data that I have acquired from official sources throughout this study.

Translator training was also the topic of Fátima Dias’ dissertation for the Postgraduate Translation Teacher's Certificate (2001), where she listed 41 courses available for the training of translators and interpreters in Portugal. This number includes courses at language institutes and university-level programs. Most of these programs award the degree of “Licenciado” (four to five years) or “Bacharel” (three years). The largest universities offer post-graduations in translation. There is record of only two Master’s programs in translation and no doctoral programs specifically in this field. At that time, the status of translation as an academic discipline was very limited, with most programs and courses being oriented towards the professional practice of translation.

It should be noted that Magalhães and Dias use different methods to include programs and language courses in their research. Dias lists all possible language variants of a particular program, whereas Magalhães does not follow a consistent methodology in this particular regard. Nevertheless, the growth in translator training programs is clear.

Durão (2007) revisited the topic of translator training just one year after the initial implementation of the Bologna Process in Portugal. In her doctoral thesis dedicated to translator training, Part II presents an analysis of the situation at that time. Durão devised a survey to capture a profile of the language services providers and gather information about the market that was requesting their services. Survey respondents pointed to an excess of language services providers, although there was a lack of specialized language services providers in technical areas. Language services providers are also reported to be unprofessional. Survey respondents also criticized the training of language services providers, indicating gaps in training, and noting an overall low quality of students of translation. The translator training institutions are seen as out of touch with the market conditions and requirements. The respondents also suggested more focus on specialized translation. In this survey, respondents indicated that proper higher education is only one component of translator training, and that personality and life experience are also relevant.

The profile traced by Durão of language services providers is that of a young, urban professional, with an average of five to nine years of professional experience. Most state translation as their primary activity but a correlation was found between professional maturity and full-time dedication to translation as a professional activity. Nearly all language services providers are holders of a university degree, mostly in the fields of translation, languages, and linguistics.

She then presented an overview of the academic programs in translation, analyzing not only programs in translation and interpreting but also programs in other fields that contain, to a greater or lesser extent, translation courses. This was followed by a comparison of such programs against a benchmark stemming from a Thematic Network Project in the Area of Languages I (TNP1). Durão concluded that the programs essentially trained students in languages, literature, culture and linguistics, with little time devoted to skills specific to translation. On top of that, a very large portion of that time was allotted to so-called general translation. In her research, Durão reported 23 first-cycle programs in translation or related to translation across 13 institutions. Once again, the methodology does not allow for a direct comparison. For example, the results do not seem to include all possible language variants of any given program, and Durão also includes in her count

programs that list translation a potential future occupation for graduates, but which do not have any courses in translation.

Reliable data series made available by the Directorate-General for Statistics in Education and Science (DGEEC) of the Ministry of Science and Higher Education only go back as far as 2005, and changes in course names as well as the Bologna Process render a comparison more difficult. In 2005, 925 students were enrolled in first and second-cycle translator training programs, and one student was enrolled in a doctoral research program in translation. In 2015, the number of students enrolled in translator training programs (BA, MA and post-graduate specialization) reached 1424, and 24 students were enrolled in doctoral research programs in translation or Translation Studies. I will explore these figures in detail later in this thesis, yet it is clear that interest in translator training has picked up significantly, and even more remarkable is the jump in research being done at an advanced level specifically in translation.

2.5. Competences

2.5.1 Translator competences in the public eye: two cases in Portuguese research

In an article published in the journal *Confluências*, Fátima Dias (2006) published a brief analysis of employment advertisements asking for Language Service Providers. She was looking to determine how they contributed to the image of translation in Portugal.

Dias concluded that the advertisements are by and large vague in terms of requirements, which reflects an inherent difficulty of employers in defining the exact competences and profile of a translator. In the examples she cited, translation companies stand out as more knowledgeable about the requirements expected from a translator. Moreover, translation is often combined with administrative duties in the employment advertisements, reflecting the fact that translation has been taught for many years in institutions that train administrators and translators, often in the same program. In all, Dias argues that the image of translation in Portugal is distorted in a negative way.

Valdez (2009), in a study on the invisibility of literary translators in Portugal, concluded that despite the significant role of translated literature in the Portuguese publishing industry, the translator is essentially invisible in the reception of translated works. Only 20 percent of all critical reviews analyzed by Valdez include references to

the translation process and the role of the translator. This suggests that even in specialized circles translator competences are either ignored or simply unknown.

Both research pieces are relevant for targeting Portugal and both go to show the status of the translator in society at the time of the publication, and how translator competences are perceived by employers and specialist readers.

2.5.2 Translator competences in translator training

In academia, the picture is different. As seen above, there is growing demand in Portugal for translator training, there has been a shift towards specialization in translation programs and research is also on the rise. Over two decades ago, Magalhães noted that most translation schools, especially in higher education, sought to train literary translators and disregarded technical translation, even though 90 percent of translators translated non-literary materials (1996, p. 215). I can trace the shift back to the pre-Bologna years.

Maia (2003) introduced the topic of soft skills as part of translator competences. She argues that on top of the traditional language, culture, literature, linguistics, computing and translation courses, students should be taught to specialize and communicate with other professionals in their fields of specialization. This particular view is significant of a change in paradigm in Portugal, where universities open up to society and hard skills are replaced or supplemented by soft skills to adapt to a world in flux.

Four years later Durão surveyed a large group of translation service providers, who listed the following requirements for translators to succeed in the market: (1) command of the source language at nearly bilingual level; (2) reasonable command of the target language in terms of writing; (3) command of ICT tools, especially translation tools; (4) being pro-active, meeting deadlines, applying strict quality standards, and meeting ethical and deontological principles; (5) being able to work for hours on end; (6) being able to work independently; and (7) being creative and able to adapt the target document to the intended effect and to the client's demands (2007, p. 141). I can find these skills in the most recent models of competences for translators, which shows that the dialogue between the industry and the training institutions has apparently borne fruit.

Translation (and translator) competence models vary significantly. A tabular review by Lafeber (2012, pp. 11–15) of the models from the late 1970s until 2011 is visually insightful as regards the expansion in the skill set required for translation throughout the decades. The earliest models in this review — like Koller's, Delisle's or

Wilss' — focused mostly on linguistic components, i.e. on source and target language competences. As the years progress, the table columns on the right of source and target components are increasingly filled with extra-linguistic skills. Let us go in detail into some of the most notable contributions.

In the mid-1990s, Hurtado Albir (1996, p. 34) described a translation competence model formed by a set of sub-competences. The model unambiguously included linguistic and extra-linguistic competences and it was clearly formulated to highlight two particular competences that deserve particular attention in curriculum design of translation programs: “translatorial” competence and a competence related to translation as profession. The latter was clearly in sync with developments in the field of computer assisted translation (CAT) tools and the consolidation of the localization industry in the 1990s (Esselink, 2000, p. 6 and 359).

A similar concern was at the core of the LETRAC (Language Engineering for Translators' Curricula) research project, which sought to address “a gap that exists between the training of translators at universities and polytechnics and the requirements of professional life” (IAI, n.d.). This EU-funded project lasted from January 1998 to March 1999.

The 2000s definitely brought down the notion of the translator as a solitary person, working in isolation using a static skill set. Kiraly's social-constructivist approach to translator education (2000) further expanded the competence model to include a social dimension of interaction with other colleagues and subject matter experts. Kiraly also addressed the issue of ever-changing skills in the translation industry and the need to find new pedagogical approaches to incorporate those skills in translator training. Kiraly established a clear difference between “translation competence”, i.e. producing an “acceptable text target text in one language on the basis of a text written in another”, and “translator competence”, which involves joining a number of new communities, such as communities of language experts, subject-matter experts and proficient users of traditional and new technologies (2000, p. 13). This social constructivist approach consolidates the role of soft skills like teamwork and adaptability in the training of translators.

Douglas Robinson (2001) also emphasized interpersonal skills and used the concept of intelligence in training translators as a tool for analyzing and adapting to different texts and contexts (drawing on the framework of multiple intelligences and learning styles).

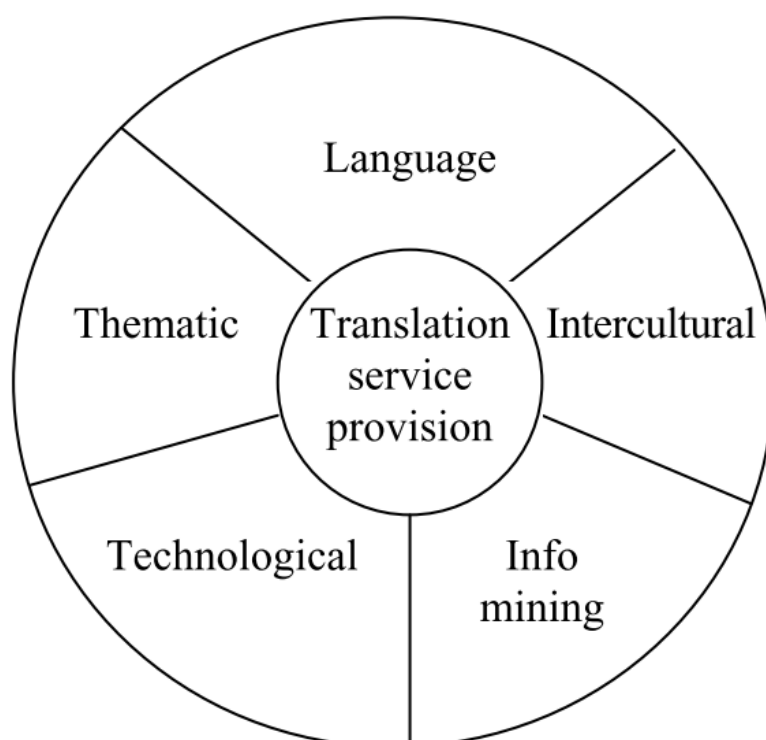
Going clearly against the tide, Anthony Pym advocated a translational competence model comprising the following two skills: “the ability to generate a series of more than one viable target text (TT₁, TT₂ ... TT_n) for a pertinent source text (ST); and the ability to select only one viable TT from this series, quickly and with justified confidence” (2003, p. 489). Pym argued for abandoning the ever-growing, ever-changing multi-component models, which cannot keep pace with market developments, in particular with technology, and whose legacy is “one of the more confused and disparate junkyards of contemporary Translation Studies” (2003, p. 493). Another criticism of the multicomponential lists of competences is a hidden self-interested agenda of translator training institutions, that use them to gain power and independence from modern languages and linguistics departments.

More recently, Kelly (2005, pp. 32–33) listed the competences that are desirable in translation graduates: (1) communicative and textual competence in at least two languages; (2) cultural and intercultural competence; (3) subject area competence; (4) professional and instrumental competence; (5) attitudinal and psycho-psychological competence; (6) interpersonal competence; and (7) strategic competence. The list is not intended to be normative and does not provide indication of the weight of each competence in curricular design.

The latest model from the PACTE group (Process of Acquisition of Translation Competence and Evaluation) comprises five inter-related sub-competences: (1) bilingual sub-competence; (2) extra-linguistic sub-competence; (3) knowledge about translation; (4) instrumental sub-competence; and (5) strategic sub-competence. It also includes psycho-physiological components. The strategic sub-competence is considered the most important of all due to the decisional nature of the translation process (Beeby et al., 2011).

Finally, I come to the competence model released by the expert group of the European Master's in Translation (EMT) project in 2009. It is intended as a reference framework for curricular design for Master's programs in translation. It comprises six areas of competence (see Table 1), some of which are divided into two components. In total, 48 different skills are listed (EMT, 2009).

Figure 3. EMT competence model



Built on top of EMT and designed to feed back into the EMT, the OPTIMALE project provided data on the translation profession and its evolution in a time of increasing automation. Although it did not provide a competence model, it researched market needs and organized workshops and conferences to bring together the industry and translator trainers. The project delivered an interactive map of translator training institutions in Europe and, most significantly, an employer consultation to determine the most important competences. The results show production quality scoring very high, and the rest of the list shows a balance between skills that are inherently translational and skills associated with the business side of translation as a profession (OPTIMALE, 2012, p. 12).

2.6. Training for markets

Whether universities should train their students to cater for specific market needs, and produce a “practice-oriented theory – a theory rooted in best practice, directed at improved practice” (Chesterman & Wagner, 2002, p. 133), is a perennial discussion. However, it is clear by now that translation competence models have to a large extent evolved in keeping with specific market demands. Significant funding is also being

channeled by the EU to enhance and harmonize the training of translators. Another reason is the scarcity of highly qualified professionals for inter-governmental organizations (IGOs), as pointed out by Lafeber (2012, p. 3). However, little data exist on actual market needs and on the quality of current translator training as perceived by the employers. A notorious, recent exception is the yearly ELIA report, which now includes some items related to recent graduates.

There has been some research articulating freelance translators and training. Dam and Zethsen (2011) surveyed the Danish translation market to determine the status of translators according to their type of employment, and training was one of the four primary parameters. Chodkiewicz (2012) studied the relevance of the training as perceived by students or by professionals after having completed their degrees. Atkinson (2012) explored the perception of success among freelance translators, shedding light on the issue of psychological skills which have become prevalent in translation competence models. For the Portuguese market, Ferreira-Alves (2011) is the only in-depth study into the professional and sociological features of freelance translators in Northern Portugal, including the relevance of training for their professional lives.

Limited literature also exists on translation at institutions and inter-governmental organizations. Mossop (1988) reported on the intricacies of institutional translation at Canada's Federal Translation Bureau and suggested the inclusion of translating institutions in translation theory due to the very particular nature of translation in bilingual or multilingual political settings. Koskinen (2000) and Wagner et al. (2002) reported on translating at the European institutions. Both accounts provide insight into the functioning of the translation services but they offer different perspectives. Koskinen draws a parallel between politics and language strategies at the different bodies of the EU, and translation theory, uncovering specific traits of imbalance between languages in the EU translation services, along the lines of Klaudy's asymmetries. Wagner et al. are predominantly descriptive, detailing the meanders of the different translation services and the challenges the EU translators face in their professional activity. Of particular interest is chapter 3, on "How to get in", where the authors disclose data for success rates in competitions ranging from 1 to 10 percent.

Lafeber's research (2012) is notoriously different from previous literature in this particular field. She set out to determine the most important skills for translators at inter-governmental organizations and the efficiency of the current models. She then matched them against the current admission procedures for job applicants at IGOs, in particular

the language tests, which are at the core of any such procedure. Her research methodology is strongly empirical and based on an ample pool of data. Lafeber's conclusions point to a currently incomplete model of assessing the candidates, and she is able to make several recommendations for improvement in the testing procedures. Lafeber is also innovative in the sense that her research provides important insight for translation trainers, especially those specializing in institutional translations and developing programs or courses in this field. It should be noted that Mossop, Koskinen, Wagner and her co-authors, and Lafeber all had inside access to the institution they reported on. With the exception of Koskinen, all are or were permanent staff of the institutions.

Soares (2012) researched into the translation needs of large companies in Portugal. He ran a survey on a pool of large companies (> 250 employees) to determine the translation services most frequently requested by these companies, the languages and domains in highest demand, satisfaction, and strategic importance of translation for business development. I would highlight the high proportion of translations performed using non-professional solutions (i.e. alternatives to translation companies and professional translators): 37 percent. Soares also presented a case study related to the creation of an in-house translation department. This is a rare situation. Little over 12 percent of companies have translators as a specific function on their staff. The SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) is a clear indicator of the reasons that led this company to create the in-house translation department: corporate culture, specialization, quality and lower costs than outsourcing (Soares, 2012, p. 141). For the final section of this study, a pool of translators working in translation companies were interviewed on three main topics: economic relevance of translation for clients, the Portuguese translation market, and competences and translator training. Regarding the topic of competences and translator training, a degree in translation is considered highly relevant, as well as specializing in different thematic areas. Flexibility and dynamism are seen as important skills to cope with varying market demand and future changes to the profession. (e.g. machine translation).

Having reviewed previous studies that provide information inform about the evolution of the profession of translator, the market and translator training in Portugal, as well as translator competences, I now turn to studies of the market as a system of signals that can help lay a methodological framework for this study.

2.7. Information asymmetry

Translation to and from European Portuguese is by and large an asymmetric space. Asymmetric in terms of the languages and cultures on either side of the translation (Klaudy, 2017), and also in terms of how the market and the profession are set up in each country.

Chan (2009a) pioneered the use of information economics to analyze the translation profession, in particular the concepts of asymmetric information and adverse selection in the hiring of translators. Chan specifically considered the signals used by recruiters to differentiate good and bad candidates, in particular translator certification systems. Chan concluded that such systems could be accepted by recruiters as an effective signal, but recruiters currently see academic degrees as a stronger signaling mechanism. In order for certification systems to work effectively, and considering the globalized nature of the profession, closer cooperation between certification systems and professional organizations is required across countries and regions. Moreover, there is a need for “professional translator associations, translator-training institutions and other stakeholders to work together in developing multilateral signaling devices that can meet the demands of employers and clients” (Chan, 2009a, p. 217).

The recruitment procedures of in-house and freelance translators differ significantly in length, cost and complexity. Recruiting freelancers is marked by remarkable uncertainty, as an ample supply of professionals exists in the market and recruiters must navigate through several signals to select the appropriate professionals, and often they have to do so in an expedited fashion.

George Akerlof first used the concept of “asymmetrical information” in his seminal article “The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism” (Akerlof, 1970), although a similar concept had already been introduced by Kenneth Arrow under the name of “informational inequality” (Arrow, 1963). Both terms refer to a situation where economic players engaging in a transaction have different degrees of information about the product or service being transacted. Akerlof uses the famous example of a used car, where the seller has better information about the car than the buyer. Other canonical examples are insurance, where it is much easier for the applicant to assess the risks of their behavior than for the insurance company, or the social background as a proxy for good or bad schooling.

The translation industry is an inherently asymmetric space, especially in organizations with very large translation needs or expansive localization programs into dozens of languages. In a common translation setting, the translator has better information about their ability to perform the task than the client. Although some aspects of the translation task are easily verifiable, such as the format and the electronic tools used to perform the translation, in most translation settings the client cannot promptly verify the quality of the outcome. Translations are usually commissioned because the client does not know at least one of the languages, and this creates a significant informational gap. In order to overcome this gap, the client needs to request verification from a speaker of the target language and potentially from an expert in the field, depending on the complexity of the translation task.

In very large settings, like multinational companies or intergovernmental organizations (IGO), complex verification systems are devised to ensure a certain standard of quality that is usually quite high.

IGOs have little margin for errors, as these may have significant economical, legal, and even political costs. In the European Union (EU), for example, all language versions of legislative texts have equal original version status (Mańko, 2017). The legislative processes leading up to legislative texts are often long and involve multiple rounds of drafts, revisions, and modifications, and “there is constant consultation and cooperation between text originators, legal experts, translators and revisers” (Yankova, 2008, p. 139). This constant flow of information across stakeholders keeps information asymmetry to a minimum.

Yet not all legislative texts come into effect in the same way. For example, regulations are legislative texts adopted by the Council of the European Union and the European Parliament that are applied directly across the Member States. They do not require being transposed to national law, and they are immediately binding from the date of entry into force. Directives, on the other hand, set goals for EU countries to achieve but Member States need to devise their own laws to achieve the goals. While the implementation of directives may accommodate some room for amending potential translation issues before becoming law in each country, regulations do not.

Multinational companies employ translation in their business to different degrees. Some do so only for communication purposes, whereas others need translation of their products or contents. Translation is not a core business for multinational companies. While these companies may have an in-house team for managing the translation effort,

most translation work is performed by third-party providers. This translation work is outsourced to multi-language vendors, who in turn outsource the translation work for each individual language to single-language vendors, usually in-country. The more layers are added to the process, the opaquer it becomes, and information asymmetries grow.

Technology companies, like Microsoft and Google, have localization programs which include translation and technical adaptation of its products to country-specific norms and standards. In informational terms, this adds extra challenges. On top of the information asymmetry inherent to the very large number of languages involved in these programs, there is also the challenge of ensuring a similar degree of technical functionality for their products across all localized versions. To minimize the information asymmetry and align the different people working in these projects, these companies devise style guides, glossaries, and technical guidelines that translators and technicians are required to use. They also develop their own tools for translating or localizing specific content.

These two companies also provide information on establishing localization programs for other companies based on their own experience. This information is publicly available. A common recommendation from both companies is establishing clear channels of communication so that product teams and localization professionals are on the same page and to clarify any questions that may arise during this process, which can be ongoing in the case of global companies.

However, they still face the challenge of verifying the final product for quality and functionality to make sure that no unintended outcomes arise. Microsoft (n.d.) suggests that the “localized product can also be tested by a third party, preferably by native speakers of the target language” and Google (n.d.) adds that the quality assurance process of content should be prioritized. Four major categories of content are listed: Branding/Marketing, Legal, User interface/mobile app, and Support. The first two categories are highly visible and issues in legal content may have serious legal implications, therefore all content in these two categories should be fully reviewed by linguists and legal experts. The remaining two categories of content can be measured for use and only the most visible or used content should be prioritized for review.

This suggests a risk-based approach to information asymmetry. Content that may impact brand image or have legal repercussions is deemed high risk and subject to close scrutiny, whereas content that is little used or perishable is lower risk and can be sample-reviewed. The notion of perishability is put forward by Way (2018, p. 160) for content

that does not have a long shelf-life, i.e., content that will not be visible for a long period of time. We find a prime example of this in Microsoft's support pages that are translated using machine translation. They are constantly regenerated.

Given the complexity and extent of the translation effort, companies that outsource translations also hire language quality evaluation (LQE) or language quality assurance (LQA) services from a specialized vendor. LQE and LQA services are intended to provide information on the quality of the translation, thus lessening the information asymmetry and the likelihood of adverse outcomes.

2.8 Signaling in the job market

Informational asymmetry and signaling in the job market were further explored by Michael Spence using a model where the employer does not know beforehand the productive capabilities of the job applicant and must take the decision of hiring, or not, under uncertainty (Spence, 1973, p. 356). Spence splits the observable, personal attributes of the applicant in two categories: indices and signals. Indices are unalterable (e.g., gender or race) and signals can be manipulated by the applicant (e.g., education). The costs of manipulating a signal, like improving one's education, are termed signaling costs. Signaling costs are not necessarily monetary, they can mean effort (e.g. the time needed to learn something). In this model, a crucial assumption is that "the costs of signaling are negatively correlated with productive capability" (Spence, 1973, p. 358), i.e. the signaling costs are not equal for all applicants.

Spence used education abundantly as an example in his model, not only in terms of private return (i.e. benefit for the job applicant), but also in terms of social return: "We have an information problem in the society and the problem of allocating the right people to the right jobs. Education, in its capacity as a signal in the model, is helping us to do this properly." (Spence, 1973, p. 364).

In Spence's model, employers' beliefs about the productive capability of potential employees are built up over time. For this judgement, employers therefore initially use signals and subsequently observe the employees. If the beliefs are confirmed by this observation, across multiple cycles, then there is a signaling equilibrium that would theoretically enable the employer to make perfect predictions about any individual. This equilibrium is not immutable and can change as a result of feedback loops.

In this study I am particularly interested in how Portuguese translation companies evaluate prospective translators, i.e. a setting where the employer is knowledgeable in the field and has potentially developed some beliefs about the productive capability of potential employees.

Having defined information asymmetry and signaling in the job market, I turn to key terms of agency theory, especially from the perspective of organizational research.

In a review of agency theory, Eisenhardt (1989) visits its main areas of application. At the core of this theory is the agency relationship in which one party delegates work to another party. Information asymmetry occurs when one of the parties in the above-mentioned relationship holds better or more information about the transaction. Agency theory looks into contracts and the information systems devised to monitor and influence the agent's behavior (i.e. the person performing the work) in an attempt to align it with the principal's interests (i.e. the person commissioning the work). In a typical translation project, the translator knows the source and target languages, whereas the client does not. The client is thus faced with the problem of verifying the outcome of the translator's work (i.e. overcoming the information asymmetry), a task which can be difficult or expensive.

A misalignment of interests may lead to an agency problem, which has two particularly relevant aspects: moral hazard, i.e., a change of behavior on the part of the agent that is beneficial for the agent and potentially harmful for the principal; and "adverse selection", described as "the misrepresentation of ability by the agent" (Eisenhardt, 1989, p. 61), which arises due to the inability to verify the skills or abilities of the agent at the time of hiring or during the actual work. Adverse selection is a problem of precontractual opportunism and moral hazard is a problem of post-contractual opportunism (Molho, 1997, p. 8).

The variables of task programmability, information systems and outcome uncertainty often used in studies in agency theory seem especially relevant for researching the information systems devised by the employers of freelance translators, in particular for determining the kind of input required for each skill during the recruitment procedure. Significant is also the fact that nearly all translation contracts are behavior-based (i.e. translators usually are paid by the number of units of translation and not, e.g., based on the success of the translated product), which correlate positively with task programmability and risk aversion by the agent. The theory has been used in several different fields of the social sciences, especially economics, but the research done in organizational behavior is the one most directly transferable to this research.

Historically, information asymmetry is one of the greatest challenges to the theory of general equilibrium, which posits that markets tend to a general equilibrium between supply and demand. Underlying this model is the assumption that the interaction takes place in conditions of information symmetry, which is often not the case in economic relationships (Salanié, 1997). This paved the way for the theory of contracts and the field of economics of information in 1970s, which sought to study economic relationships in smaller models under more complex settings, and therefore more realistic. In those models, contracts and incentives play a key role as variables.

Agency theory and signaling theory can help us make sense of the relationships between translators and their clients in a globalized market, where asymmetrical information is the rule rather than the exception. It should be noted that the information asymmetries exist in both directions: principals want to learn as much as possible about their agents, but the latter also want reliable information about the former, e.g. about their payment practices.

2.9. Trust and signals

In the report titled *The Status of the Translation Profession in the European Union* (Pym et al., 2012b), the authors make frequent references to trust and trustworthiness between agents across the sector. Examples range from trust between translators and companies to trust between translators and members of the community that they translate for. The authors of the report suggest that regulation or certification may be a form of enhancing signals related to trustworthiness, admitting that current signaling mechanisms are often ineffective.

In decisions that are taken in conditions of uncertainty, trust plays a pivotal role. Pym et al. (2016) explore the issue of trust in signaling mechanisms in the digital age. According to the authors, market disorder occurs when the signaling mechanisms are weak and therefore unable to promote trust. Conversely, “the nirvana of professionalization is the state where [...] broadly speaking the professionals control the signals of their status” (Pym et al., 2016, p. 35). In such a setting, signals have higher trustworthiness because they are regulated and verified, but the authors openly admit that such a scenario is highly unlikely in the case of translation.

I would add that in Portugal this is even more unlikely than in other countries where certain segments of the profession are regulated, e.g. sworn translators. This topic is addressed in more detail in section 2.2.

Trust is of interest for this study because it is indicative of the robustness of signaling systems. If the transmitted signals are trusted, then we would tend to a situation of signaling equilibrium and little checking. If not, signals lose their strength and perhaps their utility.

Trust is also linked to translator ethics, and it is an integral part of the professional relation between translators and employers or clients. The latter need reassurance that the former is not misrepresenting abilities and that the translation meets its communicative purpose. Therefore, “[a]scertaining and maintaining the translator’s trustworthiness (...) becomes a major element of risk management, requiring expenditure of communicative resources and other forms of capital” (Pym, 2021, p. 152). Trust is as much a question of ethics as a question of economics. Once trustworthiness is established, the costs of maintaining it are much smaller for both parts than the initial costs incurred to ascertain the behavior of an unknown agent (e.g. by checking qualifications and testing). In real-life, this is most visible in long-running freelance collaborations. Although other alternatives – potentially cheaper – exist in the market, companies tend to go back to translators that they trust, especially for more demanding clients or projects.

2.10 Signals and cooperation

In this study, I will focus on a tripartite system consisting of employers (receivers of signals), prospective employees (signalers), and educational institutions that confer signaling power to signalers.

Translation companies receive numerous applications, either for positions that are open or spontaneous applications. After a while in business and having accumulated experience in the evaluation of applications and applicants, and after observing recently hired employees, employers develop their own set of beliefs about signals and how they are indicative of the applicant’s future productivity. Every time a new application is reviewed, or a new employee is hired, this information is added to the cycle and contributes to reinforce or change the beliefs of the employer. As stated earlier, should the beliefs become self-confirming and the employer is able to make accurate predictions about productivity based on the signals, a signaling equilibrium is achieved.

Trust is at the core of this signaling interaction. The decision of hiring a translator, in-house or freelancer, is done under conditions of uncertainty. The employer does not know all that there is to know about the prospective translator, and the prospective translator equally does not know everything about their future employer, i.e., there is information asymmetry. If trust cannot be established, there are verification mechanisms that employers can put in place, like tests.

It can also safely be assumed that information asymmetry is exploited in one's interest, at either end of the transaction. Self-interest has been at the core of classical and neoclassical Economics where “[*h*]omo oeconomicus is an agent with given preferences, pursuing his self-interest, seeking to do the best he can given his opportunities” (Vriend, 1996, p. 265). More recently, the term rationality, or rational behavior, has been used in Economics to describe choosing the most advantageous options under a specific set of opportunities and preferences. It should be noted that opportunities here mean more than transactions; they may refer, e.g., to how one occupies their leisure time.

Exploiting information asymmetries may be a more prevalent practice than one might suppose. In recruitment procedures in general, it is quite common for applicants to overstate their abilities without actually lying, and companies are known to paint a picture of working conditions and career prospects that is rosier than reality. It is plain to see how this may scramble the initial signaling.

Nevertheless, hiring does happen, which means that a certain degree of uncertainty, or information asymmetry, is tolerable to both employers and prospective employees. At some point, a modicum of trust is established and cooperation occurs. After all, employers are constantly in need to find the best people available for the job and they have developed their own ways of navigating the signals, i.e. they have their own set of beliefs that partially compensate for the information asymmetry. Alternatively, they may resort to verification mechanisms.

I can rule out a situation of signaling equilibrium in the current market in Portugal, and data in this literature review suggest this with the high coverage of testing described by Ferreira-Alves in section 2.1.

Prospective employees, on the other hand, are also aware that falsely manipulating the signals to an unreasonable extent is risky in the sense that they can be caught and dismissed. Most contracts under Portuguese law have an implicit trial period, during which the recently hired employee can be sacked for inadaptation. Moreover, a large majority of translators work as freelancers, and collaboration with a company may cease

very easily without compensation of any kind. Prospective employees thus also have their own cycle of collecting and confirming information about employers.

Cooperation is an essential condition for recruitment to occur and, I might add, for the professional relation to thrive in the long run. That is the only way in which a win-win situation may arise and both parties obtain the benefits of cooperating: the employer increases their productive capacity and the employee is paid for their work. The alternative is a lose-lose outcome.

From the perspective of the employer, the one of particular interest in this study, overcoming the information asymmetry in a recruitment process is in part result of the employer's set of beliefs and it is also achieved through analyzing a number of different signals and characteristics.

In Portugal and most parts of Europe, the most common form of pursuing the profession is without a labor contract with an employer, i.e., as a freelancer. However, this does not affect the validity of the theoretical model, since freelancers are also assessed before actually doing any work and also over time. I also know from experience that professional relations with freelancers can in fact become long-term relations.³

2.11 Summary and perspectives for this research

Translation companies are the largest employers of translators, either in-house or freelancers. However, they are notoriously missing in research on translation in Portugal. Only Ferreira-Alves (2012) offers a study of this part of the market, and that is now over a decade old.

There are abundant market research documents on the top companies in the industry worldwide, but small in-country companies are hardly ever mentioned and surveyed for their priorities or preferences.

The Portuguese market is made up almost entirely of very small operators, which is another reason why there is little information available. Fortunately, since Ferreira-

³ I should highlight that I am referring to legitimate freelancers, and not to “falsos recibos verdes”. “Falsos recibos verdes” are people who work for an employer under a hierarchy, observing a schedule and following direct orders who do not have a contract with that employer. Instead, they are registered as freelancers. Employers take advantage of this regime to cut costs with social security contributions. Firing people working in these conditions is also considerably easier than firing someone under a contract.

Alves' study, statistics have become much more reliable and abundant data are now available at the national and European levels. In particular, the institutional implementation of a specific category for statistics for translation and interpreting activities (CAE Rev 3 – 74300) makes any measurement and analysis much simpler and more accurate than before.

Three significant studies exist about the translator-training panorama and Portugal. They are spaced in time but the most recent latest dates back to 2007, a time when higher education programs were undergoing major reforms due to the Bologna Process. The studies paint a picture of programs focusing on training literary translators with an emphasis on Languages, Linguistics, Literature, and Culture.

The literature on translator competence is more abundant at European level. There are no studies or research projects in Portugal on this topic, although Universidade do Porto did take part in European-wide projects and continues to do so under the auspices of the EMT network.

For this study, I aim to update the information about translation companies and translators, as well as the panorama for training at higher-education institutions. The methodologies will not replicate previous studies, because the context has changed and new instruments exist that were not available at the time. Then, using the framework of agency theory, information asymmetry and signaling in the job market, I will analyze the production of signals and how they are exchanged between companies and prospective employees during recruitment procedures of translators. Given their overwhelming proportion of the market, I am especially interested in freelance translators but I will also collect data on in-house translators for greater breadth and for comparison purposes. This is a novel approach in Portugal and it aims to bring the industry and academia closer together by promoting a deeper knowledge of each other's ways of working and expectations.

I also aim to contribute to greater visibility of all the agents in the industry by providing sector-wide information and also about major trends, including European comparisons where available.

Chapter 3. Methodology

This chapter describes the research question, the aims of the study, the hypotheses, the variables, the procedures for data collection, and data analysis techniques. The data sources including the corpus of job advertisements, the questionnaire, and interviews are also discussed.

Quantitative methods carry most of the weight in this research project. They are almost entirely based in primary sources of data. Official, publicly available data sets are used to acquire information on tertiary education, and translation as an economic activity. For specific features of the research project, I have devised my own instruments, including the collection and categorization of data on syllabuses, the collection and categorization of data on job advertisements, and the online questionnaire to translation companies to collect data about recruitment processes. Qualitative methods are used at a later stage using interview data to add detail and diachronic insight.

The study is cross-sectional in nature, aiming to provide a snapshot of a specific point in time. For select items of higher education and translation industry data, a longitudinal dimension is added for determining trends over time.

This study is limited in scope to companies and organizations which produce translations into Portuguese (European Portuguese) and to tertiary education institutions in Portugal.

3.1 Research questions

Recruitment processes involve evaluating signals about a worker's ability to carry out specific tasks. The first research question focuses on the perceived relevance of individual signals by employers: "What signals do recruiters look for in prospective translators?"

The second research question addresses the issue of trust in signals. Since signals are subject to manipulation by job applicants (Spence, 1973), it is expected that recruiters do not trust all signals equally, if at all. Therefore, the second question is: "Which signals are trusted, and which signals are not trusted and replaced with tests?"

The third research question concerns the relation between the coverage of testing and trust in signals. Translating involves a variety of skills. Some of these skills are easy and inexpensive to verify, e.g., visually checking the formatting of any given translated text. Other skills require specialized knowledge but they are still moderately inexpensive

to verify, e.g., running automated tests on software to check if the translation retains the full functionality of the original product. Linguistic skills are among the most complex and expensive to observe in translation, requiring several professionals to verify the outcome of the translation. The question is thus: “Are some skills more tested than others?”

3.2 Hypotheses

Based on the research questions in the previous section, I hypothesize that:

H1) Employers tend to test prospective translators in areas where the signals are most ineffective.

H2) Technological competence is the least tested in freelance translator recruitment procedures.

The hypotheses presuppose a hierarchy of skills. The strategies used by employers to acquire information about prospective translators and to prevent adverse selection reflect this hierarchy of skills: at the lower end of the hierarchy, employers tend to rely on signals (from résumés, interviews, personal statements, etc.), while at the top of the hierarchy actual tests take place. Trust in signals would thus correlate negatively with testing.

3.3 Operationalization and definitions

I need to operationalize variables representing signals in order to quantify and test them. Spence (1973) uses the term *indices* for observable, inalterable attributes (like age), and *signals* for observable characteristics that are subject to manipulation (like academic details).

In any given recruitment process, employers are faced with asymmetric information. They have less than perfect information about the applicants, therefore they look for signals to overcome informational gaps. These signals are self-reported by applicants (like language proficiency), and they may be backed by a third-party certification system (like academic diplomas).

Recruiting can be a costly procedure by itself, and the result is “an investment decision done under uncertainty” (Spence, 1973). Considering the prevailing small size of translation companies in Portugal, such investments can be quite significant for them. This means that signals represent not only characteristics of individuals, but also

indications of risk for a business investment. Although I am mostly researching characteristics of prospective translators, I should not lose sight of the investment perspective as it may influence outcomes as well.

For this reason, I have devised a framework that includes variables targeting competences, testing, company demographics, recruitment procedures, and initial and continuing training. Where applicable, I seek to establish whether there are differences for in-house and freelance translators.

At the core of this project lies a set of variables related to the signaling of competences. They are related to observable characteristics of the individual, and they may or not be backed by third-party certification. These variables are based on the EMT competence model of 2009, the version available at the time of the research design. This choice is justified by the fact that the EMT framework is designed to be interinstitutional in nature, ensuring comparability, and also by the fact that it explicitly aims to create a “reference framework for training programmes in translation [...] compatible with the demands of the international environment” (EMT, 2009, p. 3). Since the study focuses on Portugal specifically, the EMT is also the reference framework closest to the local setting. The acceptance of the framework is shown by the number of Portuguese translation programs that are members of the network, which has grown from one in 2017 to three in 2022.

There are, however, limitations to the EMT reference framework as regards its use in this study. First and foremost, it was designed with second-cycle training in mind. Parts of this study cover other cycles as well, therefore the reference needs to be expanded to cover competences that are found only in other cycles. Secondly, some of the competences are too broad and complex to operationalize. In these cases, they were split into smaller units to allow for more granularity in data collection and analysis. Finally, the wording used in the EMT model is academic discourse. In order to transfer these variables to the questionnaire for translation companies, it is necessary to make some adjustments to the wording so that industry representatives can relate more immediately to the competences at stake.

The dependent variables are the relevance of the signal (measured with a Likert scale) and testing (as an indication of trust in the signal; Yes/No answer).

The same set of variables is used in the context of initial and continuing education of translators in companies, aiming to obtain insight into missing skills. The dependent variable is the volume of training (measured with a Likert scale).

Another set of variables is used for other signals commonly used in recruitment procedures, but this set of variables spans more complex mechanisms involving third parties. Six independent variables are considered: professional experience, higher education, membership of a translator association, certification issued by translator associations (ATA, IoL, etc.), recommendation letter, and direct recommendation by other professional translators. The dependent variable is the relevance of the signal (measured with a Likert scale).

Finally, there is also a secondary set of variables related to company demographics. They are used to capture specific differences related to attributes like number of permanent staff, membership of associations or management quality system in place.

3.3.1 Definitions

Employers in this study are enterprises that produce translation services, i.e. legal entities that benefit from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. They must be based in Portugal and registered for translation and interpreting (CAE code 74300 Translation and interpretation activities) as their main activity. They employ more than one person. They are also referred to as translation companies throughout this study. This definition is adapted from the definition used by Statistics Portugal.

Translators in this study are natural persons that have translation as a professional activity. In-house translators work under a permanent or temporary contract. Freelance translators are registered with the tax authorities as a separate taxable economic unit subject to the appropriate taxes, whose form of work does not oblige the employer to pay social contributions and/or whose contractual relationship is not regulated by general labor legislation applicable to employees. This definition is adapted from the definition used by Statistics Portugal.

A test is an assessment tool employed during the recruitment process to measure skills, personality, and other characteristics. It may take different formats depending on what is being assessed (e.g., a written test or an interview).

Signals are observable characteristics that are subject to manipulation by job applicants. Signals are self-reported by applicants and they may be backed by a third-party certification system.

3.3.2 Definitions of competence and skill

Competence and skill are not unambiguous terms. Throughout this thesis, competence shall have a wider meaning than skill, as used commonly in education contexts in Europe. According to the European Centre for the Development of Vocational Training (Cedefop) glossary, competence is the “ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development” (CEDEFOP, 2014, p. 47) and skill is defined as the “ability to apply knowledge and use know-how to complete tasks and solve problems” (CEDEFOP, 2014, p. 227). This is in line with the terminology commonly used in the European higher education space.

Skills are commonly divided in hard skills and soft skills. For definitions, I look to the UNESCO Glossary of Curriculum Terminology. Hard skills are “typically related to the professional or job-related knowledge, procedures, or technical abilities necessary for an occupation” (UNESCO, 2013, p. 29), and they are normally easily observed and measured. In contrast, soft skills “indicate a set of intangible personal qualities, traits, attributes, habits and attitudes that can be used in many different types of jobs” (UNESCO, 2013, p. 53). Soft skills are broadly applicable and considered transferable skills across different contexts. The UNESCO Glossary lists the following examples of soft skills: empathy, leadership, sense of responsibility, integrity, self-esteem, self-management, motivation, flexibility, sociability, time management and making decisions. In the literature across disciplines and decades that was consulted for this study, the term skill is used more frequently but often overlapping in meaning with competence.

3.3.2.1 Variables related to competences

The variables defined below follow the EMT competence framework closely, with some adaptations. Language competence is split into separate variables to enable a finer gauging of source language and target language, and translation service provision competence is split into two variables, which match the two main components of this competence as defined by the EMT expert group. This is deemed methodologically necessary to enable more detailed testing and analysis:

Source language competence

Knowing how to understand grammatical, lexical and idiomatic structures as well as the graphic and typographic conventions of the language from which the translation is performed.

Target language competence

Knowing how to use grammatical, lexical and idiomatic structures as well as the graphic and typographic conventions of the language into which the translation is performed.

Intercultural competence

Knowing how to compare and contrast linguistic practices across working languages. It has a sociolinguistic dimension, which consists of knowing how to recognize function and meaning in language variations, and a textual dimension, which consists of knowing how to analyze and understand the different elements of a document, knowing how to compare cultural items and knowing how to compose documents in accordance with the conventions of the genre and rhetorical standards.

Information mining competence

Knowing how to identify one's information and documentation requirements, as well as the strategies to attain them. It encompasses knowing how to evaluate the reliability of documentary sources and knowing how to use tools and search engines.

Thematic competence

Knowing how to search for appropriate information to gain a better grasp of the thematic aspects of a document and developing one's knowledge in specialist fields.

Technological competence

Knowing how to use software to assist in correction, translation, terminology, layout and documentary research; knowing how to adapt to new tools and formats; knowing the possibilities and limits of MT.

Production of translation competence

Knowing how to create a translation appropriate to the client's needs and to the translation situation; knowing how to define processes and strategies for the translation of a document; knowing how to revise a translation; knowing how to establish and monitor quality standards; and mastering the appropriate metalanguage to talk about one's work, strategies and decisions.

Interpersonal competence

Being aware of the social role of the translator; knowing the market; knowing marketing techniques; knowing how to negotiate with clients; knowing how to clarify the requirements and objectives of all stakeholders; knowing how to comply with instructions and deadlines; knowing how to organize teams and teamwork; and knowing how to self-evaluate.

3.4 Mixed Methods Research

Researching the signaling mechanisms in the recruitment processes of translators requires collecting and analyzing extensive numerical data. This is best achieved with empirical, non-experimental quantitative research methods. However, although numerically coded data allow for a plethora of analyses, including studies in correlation, research in non-experimental setups often requires a second source of data that is qualitative in nature. The combination of quantitative and qualitative designs is called mixed methods research. John Creswell provides the following definition:

Mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone. (Creswell, 2014, p. 4)

This methodology emerged as an alternative to the dichotomy of qualitative (QUAL) and quantitative (QUAN) traditions in the late 1980's and early 1990's (Tashakkori & Teddlie, 2009, p. 4). It enables researchers to draw on the strengths of both methods and minimize their limitations. For this study, it enables adding to quantitative results with a qualitative follow-up data collection and analysis in the form of interviews with stakeholders, to shed light on areas where the questionnaire is not entirely effective. Considering the time gap between the two stages, it also adds a diachronic perspective.

There are several types of mixed method strategies, but I deem the explanatory sequential mixed method design the most suited for this research project. As explained by Creswell (2014, p. 224), it “involves a two-phase project in which the researcher collects quantitative data in the first phase, analyzes the results, and then uses the results to plan (or build on to) the second, qualitative phase.” The main goal of this approach is to have the quantitative data analysis inform the qualitative research phase, and then use the qualitative data to add detail to quantitative results.

This study is carried out in six steps:

The first step looks into the current translator training landscape in Portugal at university level, namely the skills being taught. A brief snapshot of other non-tertiary

translator training opportunities is also provided. Data are collected from official sources, such as public agencies, government bodies or the institutional websites of the universities. (QUAN)

The second step addresses the translation industry in Portugal. Using a quantitative approach based on official sources, I aim to provide a socio-economic profile of translators and translation agencies in Portugal. Data are collected from official sources, such as public agencies and government bodies, as well as specialized agencies. (QUAN)

The third step focuses on the skills required by the employers of freelance translators, and the signaling of such skills. By way of surveying and analyzing job advertisements from print and online media, as well as from outsourcing platforms, I establish the skills sought by companies and organizations, public and private, when looking to hire a translator. (QUAN)

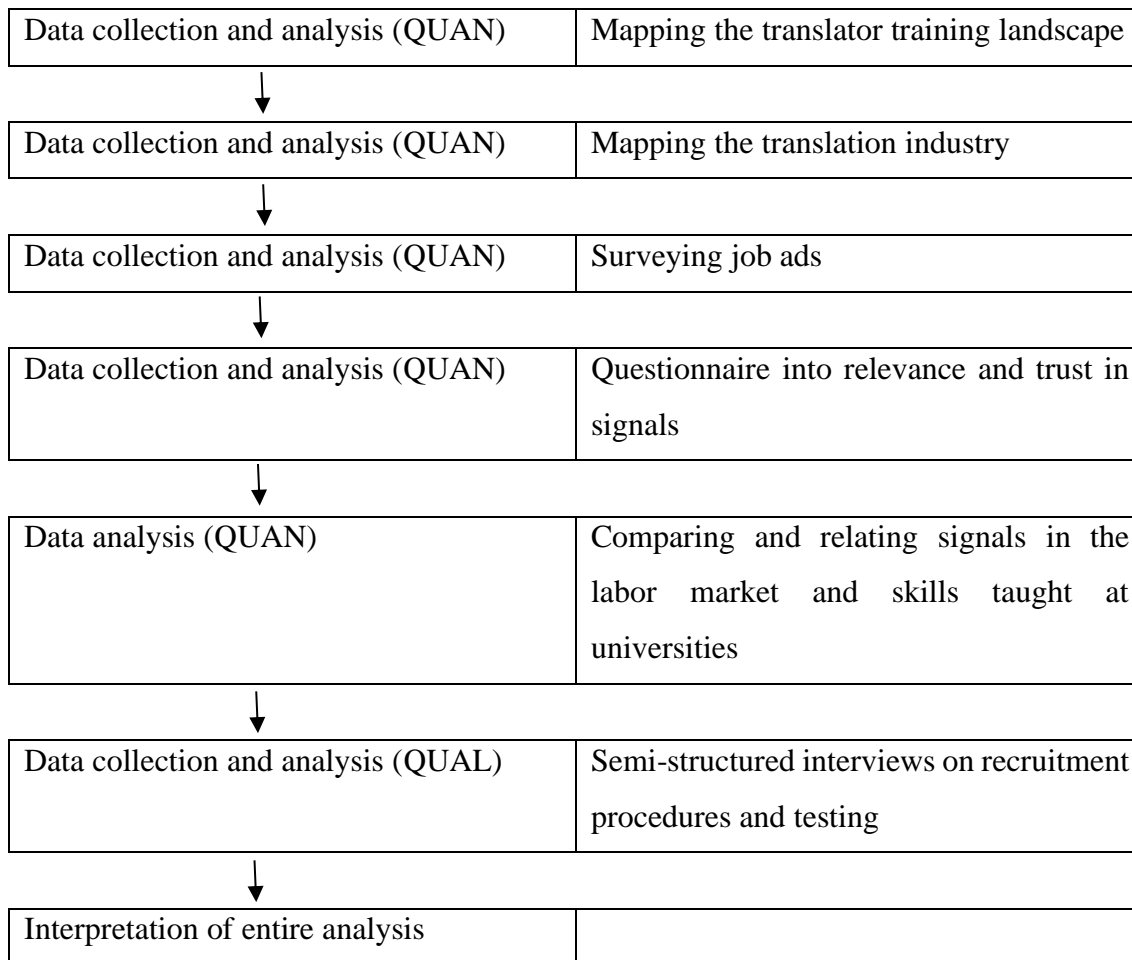
The fourth step deals with the actual acquisition of information about prospective translators. Using a questionnaire targeted at translation companies, I gather information on the methods used to minimize the information asymmetry and determine how companies rate the signals received from applicants in terms of relevance. By determining which skills are tested and which skills are signaled, I seek to establish whether employers in this industry trust the signals. (QUAN)

The fifth step compares the data on signaled and tested skills with the skills currently being taught at translator training institutions. I aim to determine whether there is a mismatch, whether trust mechanisms exist between translator training institutions and employers, and in what areas they are strongest. (QUAN)

The final step of the study takes the form of semi-structured interviews primarily with participants in the questionnaire. This is informed by the data collected in previous stages of the research project, and it focuses on topics raised in the open-ended questions of the questionnaire and testing procedures. (QUAL)

The following visual model (Figure 4) outlines the structure of the research project.

Figure 4. Sequential structure of the research project



3.5 Scope

This study focuses mostly on the employer side of the translation industry, namely companies and organizations, public and private. This study is limited in scope to companies and organizations which produce translations into Portuguese (European Portuguese), but not necessarily based in Portugal.

As regards higher education, this study is limited in scope to institutions located in Portugal.

3.6 Mapping the translator training landscape

Translator training has changed substantially in Portugal over the last three decades. In the mid-1990s, a number of higher education institutions throughout the country offered undergraduate degrees in translation studies. Second-cycle programs leading to a Master's degree in translation were scarce, and there were no dedicated doctoral programs in translation. The implementation of the Bologna Process, a change in demographics and a need to recycle modern-language programs brought about significant changes.

In order to map the translator training landscape in 2017, I began by checking the database of the Portuguese Agency for Assessment and Accreditation of Higher Education (A3ES). This enables us to extract a list of all accredited programs for all cycles. I use the following eligibility criteria:

1. 1st cycle Programs specifically on translation or applied languages courses with a track in translation
2. 2nd cycle Programs specifically on translation, specialized translation or translation and interpreting
3. 3rd cycle Programs specifically on translation or translation studies.

I then accessed the data repository of the Directorate-General for Statistics in Education and Science (DGEEC), a central government service. Data are available online either in structured format (reports) or as raw data. Here I sourced data relative to the public and private higher education institutions for the academic year 2015-2016, the most recent dataset available. By doing so, it is possible to determine which programs were running and/or taking in new students. Once this is established, I visited the individual pages of all programs in all institutions to collect data on the study plans for each individual program. This information was collected in March 2017.

There are seven undergraduate programs in Portugal focusing specifically on translation. There are three more undergraduate programs in applied languages with relevant tracks in translation. I was able to collect data from all but two of the accredited undergraduate programs. In both instances, the courses were being discontinued and their pages were no longer available online. For the purposes of this project, I will consider eight undergraduate programs accredited by A3ES.

At Master's level, there are fourteen accredited programs in Portugal focusing specifically on translation. Some of these courses have several language or thematic variations. For the purposes of this project, I will consider thirteen programs accredited by A3ES, since the Master's program on "Mediação Cultural - U Minho" was not accepting new students and it was undergoing restructuring.

There are three doctoral programs in Portugal focusing specifically on translation studies. In other universities, students may obtain a PhD in translation studies by pursuing other programs in the field of languages, literature, and linguistics. For the purposes of this project, I will only consider programs specializing specifically in translation studies. Two of the programs are run jointly by two or more universities.

The data were compiled in a standard format for all programs. Each course of every program is tagged using the categories of competences of the EMT expert group. As explained in section 3.3, some adjustments were made to the competence framework to enable its use as a benchmark across this study. Firstly, I expanded the model in order to include competences found in all cycles. I have also split some competences into smaller units to ensure comparability and to capture the competences in a more granular format, i.e., using narrower categories for more detailed reporting on the competences developed throughout the programs in translation.

Nevertheless, addressing such diverse programs using a single benchmark requires further methodological adjustments. While some courses closely match the competence model and are easily classified, others engage several competences. In such cases, I have chosen to use an approach based on the primary relevance of the course for each competence. I thus classify each course according to its primary competence.

I have identified 11 primary categories of competences across all three cycles for the analysis of each program.

Language 1 (L1)

Under this category, I file ECTS credits for courses that deal specifically with mother-tongue skills. Highly practice-oriented L1 Linguistics courses will fall under this category, also known as first language, native language or mother tongue.

Language 2/3 (L2/3)

Under this category, I file ECTS credits for courses that deal specifically with the acquisition of second/third language skills. Highly practice-oriented L2/3 Linguistics courses will fall under this category. Most BA programs require learning two non-native languages; MA programs tend to focus on one.

Intercultural

This category of competence in the EMT framework covers many different abilities, both at reception and production level. “Comparison and contrast between discursive practices” is usually dealt with in several different courses. Translation theory will fall under this category. The more theoretical courses on Linguistics and Culture will fall mostly under this category.

Information mining

Under this category, I file ECTS credits for courses where students learn how to identify information and documentation requirements, as well as terminological research strategies.

Thematic

Under this category, I file ECTS credits for courses that specifically bring knowledge in specialist fields and applications.

Technological

Under this category, I file ECTS credits for courses where students learn how to use software for translation and related tasks, as well as find out about the possibilities and limits of MT.

TSP – Production

Under this category, I file ECTS credits for courses where students learn how to evaluate and define strategies for translation into L1, as well as proofreading and editing. Interpreting courses, especially at introductory level, will also fall under this category. For the purposes of scenario building, this category will take precedence for electives where the student has the choice of several courses training different competences, but where TSP – Production is one of the competences across the different options available. For example, at the University of Minho, second-year students enrolled in the Applied Languages program have three options for an elective course: Ethics and Social

Responsibility, Applied Linguistics, and Audiovisual Translation. In this case, the credits are assigned to the category TSP – Production, because Audiovisual Translation falls under this category and it is a likely choice for students aiming to pursue a career in translation.

TSP - Production into L2

Under this category I file ECTS credits for courses where students learn how to evaluate and define strategies for translation into L2, as well as proofreading and editing. Interpreting courses, especially at introductory level, will fall under this category, if applicable.

TSP – Interpersonal

Under this category I file ECTS credits for courses where students learn how to handle clients, manage projects and work in a team environment.

Research

Under this category I file ECTS credits for courses that specifically train students to do research work. Since Bologna, MA Students have the choice of completing a research dissertation, a project or doing an internship and presenting a report at the end. These ECTS credits will also fall under this category. This category is not referenced in the EMT framework, yet it is a very relevant component of 2nd cycle courses, accounting for almost 50% of the ECTS credits in some cases.

Other

Under this category I file ECTS credits for courses that do not fall under other categories or elective courses where the student has a wide array of choices that cannot be brought under other categories, or that cannot be accurately determined. Courses on literature, which are quite common in Translation programs, will be listed here.

The data are laid out in tabular format listing all curricular units, ECTS credits, year and/or semester. Each curricular unit is matched to one primary competence. The weight of each competence is calculated based on the number of ECTS credits.

Finally, to obtain an overview of how research in translation has evolved in Portugal, I run a search in the National Registry for Theses and Dissertations (RENATES) for PhD theses and Master's theses and internship reports. Here I aim to determine trends in the production of academic works.

This section is based entirely on primary data. The electronic tool used for the collection and analysis of data is Microsoft Excel.

3.7 Mapping the translation industry

This section describes the methodology used to map the translation industry in Portugal. The goal is to establish an overview of the agents interacting in the translation market and to create a benchmark for the survey questionnaire. I also source information on associations and membership, as these are commonly used as proxies for determining the size and cohesion of the industry.

Acquiring data on the translation industry from official sources in Portugal is a straightforward process, especially for companies. In fact, most of the platforms that provide information on companies and sectors share the same data set. IES – Informação Empresarial Simplificada (Simplified Business Information) is a mandatory reporting requirement for companies based in Portugal. Every year, companies report a range of financial and statistical information in electronic format. This information is processed by the tax authorities and statistics agencies. The latter also make them available to other organizations and researchers. The information is highly reliable and publicly available.

3.7.1 Translation companies

The two main and most reliable statistics platforms available in Portugal are Statistics Portugal, the official statistics agency, and Pordata, a data portal run by the private Fundação Francisco Manuel dos Santos. Pordata uses data provided by Statistics Portugal to a very large extent. Both platforms offer data visualization tools that can be customized to provide statistics on almost any area of society. Access is free of charge. This resource is available in Portuguese and English. In this study, I use Statistics Portugal to obtain specific primary data for my analyses and Pordata for support in data visualization, as the interface is more user-friendly.

Bank of Portugal, the central bank of Portugal, has an internal statistics department that publishes statistical information on companies. This information is provided in aggregate format, in so-called industry dashboards. These dashboards contain a set of indicators about Portuguese companies, including financials and demographics, and they allow for comparisons with similar companies in other European countries. Once more, the information made available on these dashboards is based to a large extent on IES. Access is free of charge. This resource is available in Portuguese and English. In this study, I use the dashboard on sector 74300 Translation and Interpreting Activities to

obtain industry-wide aggregate information and financial indicators to determine how robust companies are in this industry.

At individual company level, there are private providers of information like Informa D&B and Racius. Both provide publicly available information about companies, including financial data and legal proceedings, as well as a range of proprietary analyses of commercial and structural nature. Access to most services on these sites is paid. Racius is only available in Portuguese; Informa D&B is available in English and Portuguese. They provide company directories with basic contact information. In this study, I use these services to determine whether specific companies are in business and also to gather contact information for the delivery of the questionnaire.

Since companies in Portugal can register for more than one commercial activity, I also queried SICAE (Sistema de Informação da Classificação Portuguesa de Atividades Económicas). Here I aim to determine the most frequent setup for translation companies, in particular whether they offer translation and interpreting services only or multiple services. I also check for the most frequent combinations of commercial activities.

For select items, I draw comparisons to European data using information sourced from Eurostat, the statistical office of the European Union.

3.7.2 *Translators*

Determining how many people work as translators is more difficult because publicly accessible data are not available for the whole class of professionals. Using Statistics Portugal, Pordata, or the Bank of Portugal dashboards, it is possible to determine how many people are registered as independent professionals (concept 7908 of Statistics Portugal Metainformation System, individual enterprises), i.e. working as freelancers.

However, there is no such database for people working in-house as translators – or in any other role – either for translation companies or other organizations that employ translators. Potentially, only the Tax Administration has this information, but the statistics made available only show very high-level aggregates, and no granularity is offered at the level of the professional activity. Indirect ways of reaching a figure include Ferreira-Alves' baseline finding that 84.9% of translators work as freelancers (2011) or emulating the formula used in the report *The Status of the Translation Profession in the European Union* (Pym et al., 2012b, p. 139). In said report, the researchers derived the proportion of self-employed translators and companies based on the 2007 sectoral figures for one-person companies (91.7%) and other types of companies (8.3%) published by Statistics Portugal.

The researchers then applied a ratio of 1.58 (total number of contract translators and revisers / total number of surveyed companies) obtained from Ferreira-Alves (2012) to determine the number of in-house translators and revisers. Although the classification of economic activities has since shifted definitively to CAE Rev 3 and the figures for independent professionals are now segregated from the remaining companies, I believe that the human resources profile of companies has not changed fundamentally, and the above ratio is still valid.

Association memberships, online translation directories, and online translation fora may also provide some clues as to the total number of translators. To make the calculation more complex, Ferreira Alves also found that 54.7% of translators provide translation services as a secondary or part-time activity, indicating that the actual full-time equivalents are considerably lower than what statistical bulletins may suggest.

The reliability of data also affected by the fact that translation is not a regulated profession and there is no central body holding information for any part of the profession.

3.7.3 Associations

Associations and their membership are commonly used as proxies for determining the size and cohesion of the industry. This is referred to as “potential T/I”, i.e. “the possible number of professional translators and interpreters who could be employed in accordance with the macroeconomic indicator of the country” (Pym et al., 2012b, p. 37). These figures can also be used to determine degree of cohesion or fragmentation across the sector, as well to compare the situation among translators/interpreters and companies in the sector.

3.7.3.1 Translator associations

Sindicato Nacional de Actividade Turística, Tradutores e Intérpretes (SNATTI) is the oldest professional association for translators in Portugal. It was established in 1936 as a trade union for interpreter-guide professionals. In 1990, SNATTI officially opened to two other linguistic professions: translators and interpreters. However, interpreter-guides are the predominant group of members. In 2017, only nine interpreters and 12 translators were listed among the approximately 300 SNATTI members.

Associação Portuguesa de Tradutores (APT) is a cultural association that was established in order to promote the interests of translators, the dissemination of literary, scientific and technical words, and the correct usage of the Portuguese language.

According to the articles of incorporation, membership is restricted to active translators (excluding interpreters) or other people specifically approved by majority of votes of the Board. APT was founded in 1988. In 2017, it had a membership of around 300 translators. The number has remained stable to date.

Associação Portuguesa de Tradutores e Intérpretes (APTRAD) is the youngest professional association for translators and interpreters in Portugal. It was founded in 2015. APTRAD aims to promote high-quality professional standards and sets itself up as a meeting point for all those who understand the importance of translation and interpreting for the economy and society. APTRAD also runs a mentoring program for young translation professionals. APTRAD has two distinct membership categories: permanent member and aspirant member. Permanent members are those professionally active in the field of translation or interpreting, freelance or in-house. Aspirant members are students of translation for interpreting. Upon completion of their degrees, they are required to apply for full membership. In 2017, APTRAD had a membership of 376 translators. It has grown to 599 members in 2021.

Associação Portuguesa de Intérpretes de Conferência (APIC) is an association for conference interpreters. Founded in 1987, it has a stable membership of around 50 professionals.

Associação Portuguesa de Intérpretes e Tradutores Jurídicos (APTIJUR) is an association for lawyer-linguists and interpreters. Founded in 2011, it has no known activity and no publicly available information.

3.7.3.2 *Translator company associations*

Associação Portuguesa de Empresas de Tradução (APET) is a non-profit organization that aims to promote, represent, coordinate and defend the interests of companies that have translation services as their main business activity. To apply for full membership, companies must meet requirements such as being formally organized as companies and having translation services as their main business activity, showing evidence of the implementation of a quality system, and contracting professional insurance. Only companies that have been in business for three years or more and with a minimum staff of two are eligible for membership. In 2017, 17 companies were listed as APET members on their website, a number that has fallen to 15 in 2021.

3.7.3.3 *Umbrella associations*

[Conselho Nacional de Tradução \(CNT\)](#) is a non-profit organization where education and training institutions, companies and translation professionals find a forum for exchanging ideas. It aims to defend the interests and the dignity of translation as an activity by promoting education, training, dialogue and articulation among all professionals involved in the field. Only education and training institutions or professional associations can be members of CNT. At present, the list of members includes nine higher education institutions, APT, APTRAD and APET.

None of the above associations has any power of regulation in the sector. Translators are not required to be members of any association to offer their services as translators, including legal translations. Translations are certified by a notary or a lawyer, or under oath in a court of law.

3.8 Methods used in the assessment of prospective translators

After mapping the translator training landscape and the translation industry in Portugal, I now turn to methods used in the assessment of prospective translators. I first survey and analyze job advertisements from print and online media, as well as from outsourcing platforms commonly used by clients and providers of translation services, such as ProZ. I aim to establish the competences and other skills sought by companies and organizations, public and private, when looking to hire a translator.

Then I describe the planning, design and delivery of a questionnaire targeted at translation companies focusing on how they acquire information about prospective translators, in particular about translator competences. This tool is designed primarily to gather information on the methods used to minimize the information asymmetry and determine how companies rate the signals received from applicants in terms of relevance. I also seek to establish whether employers in this industry trust the signals by determining which competences are tested and which competences are signaled.

3.8.1 *Survey of ads*

This section describes the methodology used in the survey of ads published in the press or available in specialized online sites for a specific period of time. The survey encompasses large and small organizations, public and private. It aims to determine the competences and other skills that are required by employers when searching for

prospective translators, including differences in competences and skills required from prospective freelance translators and prospective in-house translators. Special attention is paid to technological skills.

3.8.1.1 Planning and sources

The goal of this survey of job advertisements is to establish a relevant, non-exhaustive corpus of the job opportunities for translators in Portugal available in mid-March 2017. I aim to include job offers from employers of all sizes, from the public and the private sector, as available. I also aim to include offers for both in-house and freelance translators.

Only online sources are used. For local job opportunities, I use the two most important websites for job seekers in Portugal: emprego.sapo.pt and empressoemprego.pt.

Expresso Emprego belongs to media group Impresa and it is the online version of the print job section of Portugal's largest weekly newspaper, Expresso. Printed in broadsheet format, Expresso is a prestigious newspaper that targets above-average audiences in terms of education and purchase power. Jobs on offer in Expresso Emprego reflect the target audiences.

Sapo Emprego is the job section of Portugal's largest web portal. It has a wider target audience than Expresso Emprego, and the number and diversity of jobs on offer reflect this market positioning.

I also search for translation agencies in Portugal in Google, and I visit all first page results to look for active recruitment processes.

Since translation is a fully globalized industry, I also turn to international platforms commonly used by clients and providers of translation services. I choose to scan the opportunities available on ProZ, as this is the largest website of its category.

Job offers in large institutions, at national or international level, are rare. At the time of the survey, none was available. Therefore, in order to have these institutions and their recruitment practices included in this study, I set out to look for the most recent offers from EU bodies (EPSO, CURIA and ECB).

Finally, the site of the Portuguese Agency for Employment and Vocational Training (IEFP) is also scanned for job opportunities for translators, mainly with the aim of having a public service website represented in this study, and also to determine whether recruitment requirements differ if job ads are placed via official platforms.

3.8.1.2 Collection of ads

The collection of the corpus of job advertisements takes place on March 16 and 17, 2017. All valid search results are saved in PDF format and filed under a unique filename.

I query emprego.sapo.pt and empressoemprego.pt using the keyword “tradutor” (translator). This search yields 15 results in emprego.sapo.pt and five results in empressoemprego.pt. Five results from emprego.sapo.pt are discarded because they are not actual job offers in translation, but rather offers for working in minor linguistic tasks such as transcription or voice recordings or offers for obscure commercial roles as “business managers” unrelated to translation.

I also run a search for local translation agencies in Google to look for ongoing recruitment procedures. I restrict this search to companies showing on the first page of results. I find that only Traducta has an open recruitment procedure on their website. A similar procedure is carried out for ProZ. I query the translation jobs database for the most recent English to Portuguese translation projects. The search yields 18 projects and six are included in the sample. The criteria for the sample are an explicit reference to European Portuguese, a clear reference to the kind of translation work to be performed and remunerated work.

As mentioned above, at the time of the survey of job advertisements there were no job offers available in large institutions, at national or international level. Therefore, I visit the recruitment or contracting pages on the websites of three EU bodies: EPSO (European Personnel Selection Office), CURIA (Court of Justice of the European Union) and ECB (European Central Bank). I find four calls for tenders for freelance work and one open competition to draw up reserve lists from which the European institutions recruit new translators. All of the above include Portuguese as one of the requested languages.

Finally, I scan the site of the Portuguese Agency for Employment and Vocational Training (IEFP) for job opportunities for translators. This search yields only one result. Although this is not enough to draw generalized conclusions, the information available does signal the key information items on that platform.

The information collected from job ads is added to a spreadsheet in a format that enables the systematization of information and comparisons. The data are laid out in tabular format listing characteristics of the contract (freelance/in-house) and organization (language services provider, language school, company from a different sector, large institution). Signals (observable characteristics that are subject to manipulation) for job applicants from each individual ad are also listed, as well as any references to experience

and education requirements. Signals are further grouped into soft or hard skills (see Table 1). I also add a column regarding potential testing and certification requirements for each individual job ad. For this part of the study, indices (observable, inalterable attributes) are deemed irrelevant, and they are hardly represented in the ads, with the exception of the mandatory non-discriminatory mention M/F (masculine/feminine).

Table 1. Signals for applicants in job advertisements.

Hard skills		Soft skills
Source language	Thematic	TSP - Interpersonal
Target language	Technological	
Intercultural	TSP - Production	
Information mining		

This is the first moment in the study where the independent variables based on the EMT competence framework are put to the test. In the following step of the study, a questionnaire tool is used to explore the variables further.

I would like to add a final methodological note regarding the type of contract. I have classified the contract types as either in-house or freelance depending on whether translators will work integrated in a company or autonomously. This classification does not reflect the actual mode of employment (permanent employment, temporary employment, independent contractor), as this cannot be extracted from the ads.

The costs of hiring permanent staff in Portugal are high and employers often try to circumvent these costs by having translators work in-house, under a hierarchy and subject to a schedule, but registered as freelancers for tax and Social Security purposes. Not only does this represent significant savings for employers, but it also makes severing any labor ties easy and inexpensive. People under such employment arrangements are called “falsos recibos verdes” (false freelancers). As this practice is illegal, it is usually not mentioned openly.

This section is based entirely on primary data. The electronic tool used for the collection and analysis of data is Microsoft Excel.

3.8.2 Survey questionnaire

This section describes the methodology used in the planning, design, and delivery of the survey questionnaire for translation companies as employers of translators. With input from the previous step in this study, the questionnaire seeks to dig deeper into the signaling mechanisms and obtain data that enable quantification and evaluation of the

relevance of signals that companies used to minimize the information asymmetry. The questionnaire includes a section specifically on testing requirements in order for applicants to determine whether there is trust in the signals. A final section about on-the-job training seeks to capture competences that companies invest in. For all signals, data are captured separately for in-house staff and freelancers, to determine differences. For contextual framing and potentially studying correlations, the questionnaire also seeks capture demographic data about the companies.

3.8.2.1 Planning

Surveying translation companies in Portugal is rare. Alves (2006) conducted a study on linking professional practice with translation training. Soares (2012) studied the translation market but focusing on the needs of translation services by large companies. The fabric of the sector, made up mostly of small entities with low association rates, makes such initiatives harder, as they represent a cost with little perceived return for small enterprises.

For this study, I choose the tailored design method, which “involves using multiple motivational factors in compatible and mutually supportive ways to encourage high quantity and quality of response” (Dillman et al., 2009, p. 16). This design method is based on a social-exchange perspective that ties respondent behavior to the expected return, i.e., the likelihood of responding varies according to the degree in which rewards are expected to outweigh the costs.

I present the survey to potential respondents as part of my wider research study to understand to what extent competences sought by translation companies are supplied by translator training institutions (higher education), clearly stressing that it is focused on the perspective of companies. My expectation is that explicitly valuing the role of translation companies and taking their input on training to translator trainers in academia is considered socially rewarding and a way to influence curricula that may reduce onboarding costs of new translators.

That said, it is clear to us that even a few minutes spent answering the questionnaire may be a cost for companies, and many might not be interested in recruiting translators or in any of the potential rewards. The structure of the sector shows that many companies are extremely small operations. The overwhelming majority of companies employ fewer

than ten people, with many potentially masking freelance operations in pursuit of more favorable conditions for taxation and social security contributions.

In order to maximize convenience and reduce costs to a minimum – for respondents and researcher – the questionnaire is to be delivered over the Internet using a specialized online service.

3.8.2.1.1 Survey population

To determine the survey population I turn to the companies register and other official statistics offices. The information made available by Statistics Portugal and the Bank of Portugal is based on information self-reported yearly by companies and usually lags the current situation by two years. SICAE is the most up-to-date source of information available, where I determine that the number of companies registered for translation and interpreting (CAE code 74300 Translation and interpretation activities) as their main activity is 298. If I also consider companies registered for CAE code 74300 as a secondary activity, the number is approximately three times as high.

For this study, the main population is companies with CAE code 74300 as their main activity. It is noteworthy that approximately 40% of these companies are registered for at least one *additional* economic activity, mostly sharing close ties with translation or interpreting, such as congress or event organization, or within the broader language sector, such as language schools.

3.8.2.1.2 Sample and coverage error

I draw the sample frame from the 298 companies listed in SICAE with CAE code 74300 as their main economic activity.

The sample includes all members of APET. After filtering out all APET members, who are to be contacted via the association's internal mailing list, I choose around 10% of the companies listed in the sample frame. Companies are drawn from the list based on brand awareness and first-hand knowledge that the organizations are actively in business and potential recruiters. These two subsets are to be contacted via email.

Since the survey is open to all participants with access to the link, there is potential for answers from companies not individually targeted via email. A snowballing effort via email or social media is not actively pursued.

Coverage error, i.e., the possibility of units of the survey population not having a chance of being included in the sample, is expected to be very low in subset one, because APET is to use their internal mailing list to reach their members. For subset two, coverage error is expected to be low, as companies are to be contacted using the emails listed on their websites. Regarding subset three, spontaneous participants, coverage error is expected to be high.

No monetary incentives were foreseen.

3.8.2.2 Design

According to the tailored design method, a successful survey is able to establish trust and convey the benefits of responding, while reducing the costs of participation. By increasing participation within the selected sample of the population, survey error is also reduced.

One of the most important aspects of successful tailored design involves customizing the survey to the situation, the topic, and the respondents. This helps make the task of responding seem more relevant to participants. Table 2 highlights features of the implementation process and the questionnaire that can be used to encourage participation as suggested by Dillman (2009) for the tailored design method.

Table 2. Features of questionnaires to encourage participation

(adapted from Dillman 2009, p. 38)

Trust	Benefits of participation	Cost reduction
Obtain sponsorship by legitimate authority	Provide information about the survey	Make it convenient to respond
Provide a token of appreciation in advance	Ask for help or advice	Avoid subordinating language
Make the task appear important	Show positive regard	Make the questionnaire short and easy to complete
Ensure confidentiality and security of information	Say thank you	Minimize requests to obtain personal or sensitive information
	Support group values	Emphasize similarity to other requests or tasks to which a person has responded
	Give tangible rewards	
	Make the questionnaire interesting	
	Provide social validation	
	Inform people that opportunities to respond are limited	

3.8.2.2.1 Language and tools

The first decision to be made regarding the design of the survey questionnaire is the language in which it is to be delivered. For the present study, I choose Portuguese, since the population is limited to companies registered in Portugal.

The Internet delivery mode is an obvious choice, as it is the most convenient and cost-effective mode for all parties. Most commercial online survey tools have the added convenience of providing design and analysis tools, and they also enable real-time

progress monitoring. For this survey questionnaire, I chose Encuesta Facil, an operator based in Spain and targeting the Iberian and Latin American markets. An important factor in my choice is the fact that Encuesta Facil offers Portuguese as a working language, which means that all navigational and structural elements are already available in Portuguese, both for responding and for analysis. In Encuesta Facil data are available for online analysis but they can also be downloaded and analyzed in Excel or SPSS. For this study, I plan to use the online platform and Excel considering the volume of data to analyze.

3.8.2.2.2 Structure

The questionnaire is structured in five sections. Section I informs the participants about the scope of the questionnaire, emphasizing translation companies as the target and explaining the goals of the study. On this page, participants are also informed that they will receive no compensation. Finally, this page contains disclosures regarding the voluntary nature of participation, confidentiality of all data provided by the participants, and reference to Encuesta Facil's privacy policy. Contact information is provided for any questions that may arise. Participants are only allowed to proceed after checking an option stating that they agree to continue. The questionnaire pre-dates the applicability of the General Data Protection Regulation. It conforms to the Code of good practices in research, research training, development and innovation of the Universitat Rovira i Virgili.

Section II collects information about the company. On the first page, the participant is required to enter basic details identification about the company and the person responding. The next pages collect demographic information about the company. On page two, the number of in-house staff enables comparisons within the sample and also with the sector as a whole, in order to determine how representative the sample is. The figure for freelance translators collaborating regularly with the company is intended to provide clues about the prevalence of either mode of collaboration and also an indication of risk-taking in decisions to hire staff. Finally, on page three, companies are asked if they are members of any association, their main areas of specialization, and whether they have implemented a certified quality system. Membership association reflects the intensity and quality of the ties with the sector in general. A certified quality system is a relevant signal – and sometimes a requirement – for clients. As such, it is also an indication of a significant cost that the company has incurred to meet specific quality standards and compliance with industry-specific norms. All questions in this section require an answer.

Section III deals with the recruitment process of translators. On the first page, participants are asked whether their company regularly hires in-house translators. This is a closed Yes/No question. Choosing “No” takes the participant directly to page nine of the questionnaire, skipping all the questions about the recruitment process of in-house translators. Choosing “Yes” opens the following page, where participants can choose the two main methods used to find candidates. This is a closed question with seven options. On this page, there is an optional text field for participants to add any extra information about their recruitment procedures.

On the next page of the questionnaire, participants are asked to rate the importance of a set of competences on a Likert scale of five points. The competences on this page match the independent variables described in section 3.3.2.1: source language competence, target language competence, intercultural competence, information mining competence, thematic competence, technological competence, production of translation competence, and interpersonal competence. For each competence, a short description is provided. The final question on this page asks participants whether their company also uses translators who translate into languages other than their mother tongue. All questions in this section require an answer.

On the final page of this section dedicated to in-house translator recruitment, participants are requested to provide information about testing practices in the recruitment of in-house translators. For each competence mentioned in the previous paragraph, participants are asked whether recruitment procedures include a test. This is a closed question with “Yes/No” answers. An optional text field can be used to provide a brief description of the testing procedure. Finally, in the last section of this page participants are asked to rate on a Likert scale of five points the relevance of the following items when selecting an in-house translator: professional experience, higher education, membership of a translator association, certification issued by translator associations (ATA, CioL, etc.), recommendation letter, and direct recommendation by other professional translators. All questions in this section require an answer, except for the optional text field.

The second part of section III deals with the recruitment process of freelance translators. The same questions, question formats and scales are used as for the in-house translators.

Section IV inquires about initial and continuing training of translators. On the first page, participants are asked whether their company provides initial and continuing training to in-house translators. This is a closed Yes/No question. Choosing “No” takes

the participant directly to page 14 of the questionnaire, skipping all the questions about initial and continuing training of in-house translators. Choosing “Yes” opens the following page, where participants are asked to input how much training is provided to in-house translators in a set of eight competences: source language competence, target language competence, intercultural competence, information mining competence, thematic competence, technological competence, production of translation competence, and interpersonal competence. A Likert scale of five points is used, ranging from No training to a Plenty of training. The second question on this page explores the technological competence in detail. Using the same Likert scale of five points as above, participants are asked to input how much training is provided to in-house translators in seven different components of the technological competence: computing in general, commercial CAT tools, proprietary CAT tools, machine translation and post-editing, localization, programming, and desktop publishing. On this page, there is an optional text field for participants to add any extra information about translator training at their companies. All questions in this section require an answer, except for the optional text field.

The second part of section IV deals with initial and continuing training of freelance translators. On this page, participants are asked whether their company provides initial and continuing training to freelance translators. This is a closed Yes/No question. Choosing “No” takes the participant directly to the final of the questionnaire, skipping all the questions about initial and continuing training of freelance translators. Choosing “Yes” opens the following page, where information can be entered about the training provided to freelance translators. The same questions, question formats and scales are used as for the in-house translators.

On the final page of the questionnaire, I thank the participants for their time and answers. Two optional text fields can be used to provide feedback about the questionnaire and suggestions for improvements, as well as topics for research.

At any point, participants can choose to abandon the survey or pause it and resume later using the buttons provided by the online survey platform.

A progress bar is implemented to show participants how far along they are in the process of completing the survey. This is a relevant tool in preventing attrition, especially in longer questionnaires.

3.8.2.3 Delivery

The mode of delivery is an online survey tool, Encuesta Facil. Participants are invited to answer the questionnaire via email.

3.8.2.3.1 Pilot

Once the initial version of the questionnaire was ready for delivery, it was sent out for a pilot (8-13 June 2017) to three company owners or recruiters known personally to the researcher. Feedback was received promptly and incorporated where applicable. Most of the remarks were related to the terminology of competences and how the industry agents might perceive them or potentially neglect some descriptions due to length or wording. No navigational or technical issues were reported.

3.8.2.3.2 Rollout

The delivery of the questionnaire started on 20 June 2017 and finished on 5 July 2017. On 20 June, I sent the invitation email to APET for relay to their members. On 22 June, the invitation email was sent to the rest of the survey sample. Considering that survey response rates declined rapidly over time, this time gap also enables observation of how the two sampled subsets (APET and non-APET) responded.

The email inviting companies to take part in the survey (Appendix 1) begins with an introductory section identifying the researcher and his affiliations, as well as a description of the scope, usefulness, and aims of the survey. The structure of the survey is also briefly described. The next section describes the delivery mode and how to answer the questionnaire. At the beginning of this section, I emphasize that the questionnaire was designed to optimize the time needed to fill it, I provide an estimate of the time it takes to answer all questions, and I also highlight that most of the questions are multiple-choice.

I then inform the recipients of who in the company can answer the questionnaire. I also inform the participants that all data are strictly confidential, and all results will be aggregated. No personal information is ever to be released in publications or public records. I also inform the participants that the online survey provider's privacy policy complies with these privacy principles.

The next section contains contact data for the researcher in charge of the project, should participants have any questions. I then provide the URL to the online questionnaire in clickable format, along with instructions on how to use it.

I finish the email by stressing the importance of participating in the survey. Attached to the email, I send a one-sheet guide to the EMT competences that includes the competence descriptions also provided throughout the questionnaire.

This email was sent to 29 companies on 22 June. I sent individual messages to each potential participant with their email addresses in the To field, as opposed to a mass-mailed, blanket email. This increases customization and makes emails less likely to be mistaken for spam. Three messages were rejected by the recipient mail servers for reasons other than spamming.

The email message intended for APET members is very similar to the email described above but it contains an extra paragraph thanking APET for their willingness to take part in the study and stressing that this is a study focusing on the perspective of companies. This email message was sent to APET's president, who then relayed the message to the association members via their internal mailing list. In his introductory remarks, the president of APET states conveys that this questionnaire is a way of conveying translator training institutions what companies *de facto* look for in new translators.

3.8.2.3.3 *Response rates*

A total of 49 invitations to the survey were sent. Three bounced back. The link was opened 21 times. A total of 18 participants (39.1%) answered at least one question and 14 participants (30.4%) completed the questionnaire.

The sample included two subsets: APET and non-APET members. The APET member subset has 17 companies and, based on the dates and self-reported information, six APET member companies participated in the survey. This equates to a response rate of 35.2% in this subset. In the non-APET member group, the original sample had 29 companies. Three email invitations bounced back, leaving the final number at 26. I received seven answers from this subset. This equates to a response rate of 26.9%.

The response rate in the pilot phase was 100%. This was due to the fact that these are company owners or recruiters known personally to the researcher.

This section is based entirely on primary data. The electronic tool used for the collection and analysis of data is Microsoft Excel.

3.9 Interviews with stakeholders

Upon collection and analysis of quantitative data, a qualitative stage of research was informed by the previous steps. It took the form of semi-structured interviews, using a set of more open-ended questions that enables both the collection of specific data points and a discussion with the interviewees.

The stakeholders were chosen mainly from the respondents of the questionnaire. The sample was originally planned to include stakeholders from five companies considered representative of the market and the survey respondents (i.e., 2-3 micro companies; 1-2 SME), plus one person working in a major global player. The choice of domestic top players was limited by scarce representation among the survey respondents, which also reflects the translation market structure, and smaller players were chosen using size and convenience as criteria. Within the companies, I targeted vendor managers and/or roles with vendor management functions (typically project managers, vendor managers or company managers).

Ultimately ten interviews were carried out. Two of the interviewees belong to the same company but they represent different generations of management. Two other interviewees are university lecturers in the field of translation; both have experience in managing translation service providers.

3.9.1 Design

The interview structure is based on the questionnaire that was previously delivered to translation companies operating in Portugal. It aims mainly at eliciting views that cannot be captured in quantitative format. While the primary aim is a cross-sectional portrait of certain practices and views, the links to the questionnaire also enable some longitudinal readings regarding the evolution of the market and on-the-job skills, as well as changes in recruitment practices. I also aim to determine whether technology is a major driver of such changes.

The interview script is divided into seven sections.

Section one addresses legal and ethical disclaimers, where the participant is informed that the interview will be recorded, the data will be stored in electronic format in the EU, and all personal and business information will be anonymized and coded.

In section two, interviewees are invited to briefly introduce themselves and the organization they represent. In the following section, they are asked to describe the company and how it has evolved over the last five years.

In section four, interviewees are asked to describe the recruitment procedures at the organization and their role in those procedures. In section five, they are asked to use a scale of “Not relevant” to “Very relevant” (similar to the one used in the questionnaire) to rate the relevance of specific items in recruitment procedures: a) language competence, b) experience, c) in-house testing, and d) academic qualifications. This last item is followed by two open-ended questions regarding the adequacy of university training of translators, and whether there is communication between private companies and universities, namely translation trainers and researchers in Translation Studies, and if so, how it might be more productive.

Section six deals specifically with the growing importance of new technologies in translation and particularly in market transformation: participants are asked whether their companies and methods have changed. This is followed by a question imported verbatim from the online questionnaire about the relevance of technology in recruitment procedures, with the specific aim of acquiring longitudinal data. Using a scale of “Not relevant” to “Very relevant”, participants are asked to rate the relevance of technology skills for the recruitment of translators. This section contains one final question regarding diversification of services as a result of technology advances and market transformation.

The two final sections are future-oriented. In section seven, participants are asked about the direction that they see the translation industry taking, what professional roles will gain or lose importance, and what new or improved skills will be demanded from professionals in the industry. Finally, section eight aims to capture the sentiment of participants by asking them whether they feel optimistic or pessimistic about the future of their company and the industry in general. Participants are also asked if they think changes are needed.

The interviews were planned to last around 20 minutes, but no hard limit was set. Due to pandemic restrictions, the interviews were carried out online.

3.9.2 Participants

Respondents to the questionnaire constituted the majority of participants. Their contact data were obtained from the questionnaire answers. The representative of the international company was recruited for this study via LinkedIn.

The first interview took place on February 7, 2022, and it served also as a trial run for the script and the technology involved.

Upon a successful first interview, the first round of invitations was sent on February 22, 2022, to five prospective participants operating in the Portuguese market, and to the representative of a global player. One automated reply was received informing that the person in question was no longer working at the company, providing alternative email addresses for contact. I forwarded the invitation to the new person in charge and also to the former manager. Two replies were received within 24 hours.

I followed-up on the invitations on March 7, 2022, and I also expanded the pool of prospective participants with three new invitations. Ultimately, only one invitation remained unanswered.

Table 3. Participants in interviews

Participant	Company Staff	Country/Region	Gender	Role	Training
SCFNO40	2-9	PT/North	F	General Manager	Translation
LCFLX70	20-49	PT/Lisbon	F	General Manager	Translation/Interpreting
SCMNO50	2-9	PT/North	M	General Manager	Languages
LCFLX40	20-49	PT/Lisbon	F	General Manager	Communication
MCMLX80	10-19	PT/Lisbon	F	General Manager	Industrial Engineering
MCMLX40	2-9	PT/Lisbon	M	Co-Owner	Languages
LCMLX40	20-49	PT/Oporto	M	General Manager	Translation/Interpreting
GCMLX50	250+	Global	M	Vendor Manager	Languages
SCFPO50	2-9	PT/Oporto	F	General Manager	Business Administration
MCMCE30	10-19	PT/Center	M	Production Manager	Translation

I should note that two of the participants listed in Table 3 are representatives of the same company but in different time periods spanning the last five years. As such, the sample includes one company with global reach and a permanent staff of over 5000, two local companies with more than 15 permanent staff, three companies employing 5-15 people, and three companies with a permanent staff of less than 5 people. The participants are mostly top management.

Although both genders are evenly represented in the participant list, I would note that at top management level there is a strong participation of women. Five of the eight companies based in Portugal listed above are run by women, largely reflecting the fact that most of the workforce in the translation industry is made up of women and that female students are also overwhelmingly represented in university Translation and Language programs. Most of the participants also have degrees in translation or related fields.

Participant names were anonymized using a coding format that identifies the type of company (SC for small company; MC for medium company; LC for large company; GC for global company), the gender of the participant (M for male; F for Female), the location of the company (NO for North region of Portugal; CE for Center region of Portugal; LX for companies specifically located in Lisbon; PO for companies specifically located in Porto), and the age of the participant (in ranges of 10 years; the notation identifies the lower boundary of the range, e.g. 40 represents the 40-50 age range).

3.9.3 Collection

The meetings took place between February 22 and March 23, 2022. Due to pandemic restrictions still in place at the time of planning, the interviews took place online. The tool of choice was Microsoft Teams, and I used the platform made available by Universidade Católica Portuguesa, a host institution for a period of this research. This tool was chosen

for being reliable and enabling the recording of the meetings, as well as for providing a transcript of the meeting in Portuguese. This service is available at no extra cost for users of Microsoft Education platform. The transcriptions obtained were of mixed quality, fluctuating between near-perfect and unintelligible. This was partly due to the fact that the service is only available for Brazilian Portuguese and the interviews were held in European Portuguese, although audio equipment quality and speech rate also influenced the ability of the system to properly transcribe content.

After each interview, the video files were processed using Microsoft Stream and downloaded for online editing. Microsoft Stream also provides an option for downloading the session transcript in the form of captions (VTT).

Before importing the video and the captions to NVivo for analysis, it was necessary to convert the VTT subtitles into a formatted text file compatible with NVivo. For this conversion, I used Teams2NVivo, a free online utility hosted at GitHub. Once finished, all videos and captions were imported to NVivo. Table 4 summarizes the collection of data.

Table 4. Interview data collected

Participant	Date	Duration
SCFNO40	Mar-16-2022	35 min 45 s
LCFLX70	Mar-11-2022	1 h 29 min 48 s
SCMNO50	Feb-07-2022	1 h 23 min 43 s
LCFLX40	Mar-22-2022	1h 11 min 48 s
MCMLX80	Mar-23-2022	47 min 13 s
MCMLX40	Mar-14-2022	56 min 36 s
LCMLX40	Feb-24-2022	58 min 54 s
GCMLX50	Mar-23-2022	1h 12 min 52 s
SCFPO50	Mar-17-2022	26 min 50 s
MCMCE30	Mar-11-2022	45 min 27 s
Total		9 h 48 min 56 s

After importing the video and caption files to NVivo, I polished the transcriptions to remove errors and repetitive discourse markers occurring mainly in moments of hesitation or at the end of sentences.

3.9.3 Analysis

For the analysis of qualitative data in the form of interviews, I chose to use NVivo. As I aim for a cross-sectional view of the interview topics, NVivo's coding feature is especially valuable for a systematic approach.

Coding is done by selecting content in files and applying codes to specific segments. After coding the content, it is possible to select a code and quickly gather all related

material and references in one place for analysis. For example, using a code like Tests for tagging all participant references to testing procedures at their companies, it is possible to have all those references in a single window for analysis and also for detecting emerging trends. Results can also be exported.

My initial code definition is based on the interview structure. This involves a top-down, deductive approach to coding based on the interview questions. It is complemented by a subsequent bottom-up discovery procedure based on the answers that were collected, leading to the generation of further relevant codes.

Table 5 describes the codes I used. Codes defined using the deductive approach (top-down) are tagged (D), and codes defined using the inductive approach (bottom-up) are tagged (I). Where applicable, they are organized hierarchically for finer analysis. Italicized fonts represent codes generated during the bottom-up discovery procedure.

Table 5. NVivo codebook

Code	Description
1_Legal	Legal and ethical disclaimers (D)
2_Introduction	Introduction of interviewees (D)
3_Company	Top level for company evolution over 5 years (D)
Age	Age of the company (D)
Directionality	Directionality of services provided (I)
Other to PT	Organization working mostly into Portuguese (I)
PT to other	Organization working mostly out of Portuguese (I)
Evolution	Company evolution and performance over the last 5 years (indicative) (D)
Growth	Positive evolution over the period (D)
Decrease	Negative evolution over the period (D)
Size	Size of the company measured by the number of employees (D)
Workforce issues	Issues related to the workforce (I)
Generational issues	Issues affecting different generations of translators (I)
Lack of talents	Issues related to lack of talent (I)
Location as factor	Issues related to lack of talent due to the location of the organization (I)
4_Recruitment process	Section of the interview describing the recruitment process (D)
In-house recruitment	Recruitment process for in-house collaborators (D)
Freelancer recruitment	Recruitment process for freelance collaborators (D)
5_Relevance of factors in recruitment	Section of the interview describing the recruitment process (D)
Academic qualifications	Relevance of academic qualifications; scale Not Relevant to Very Relevant (D)
ISO standards	Impact of ISO standards on the assessment of academic qualifications (I)
Other areas	Relevance of academic qualifications in areas not related to Translation (D)
Translation	Relevance of academic qualifications in areas not related to Translation (D)
Continuous assessment	Relevance of continuous assessment in the recruitment process (I)
Experience	Relevance of experience; scale Not Relevant to Very Relevant (D)
Language competence	Relevance of language competence; scale Not Relevant to Very Relevant (D)
References	Relevance of references in the recruitment process (I)
Tests	Relevance of tests; scale Not Relevant to Very Relevant (D)
5a_Training	Section on training and university/company cooperation (D)
Communication	Communication and cooperation between universities and companies (D)
Opportunities for collaboration	Opportunities for collaboration between companies and academia (D)
Quality of university training	Quality of initial translator training at university level (D)
Self-learning	Relevance of self-learning (I)
6_Impact of new technologies on the company and processes	Section on the impact of new technologies on company and processes (D)
CAT	Impact of CAT tools (D)
Diversification	Mentions of diversification in response to market changes (D)
Driver of unemployment	Mentions of technology as a driver of unemployment (I)
Machine Translation	Mentions of machine translation as a driver of change (I)
Relevance of tech skill in recruitment	Relevance of tech skills in the recruitment process; scale Not Relevant to Very Relevant (D)
7_Future	Section on the future of the sector
Automation	Mentions of automation as a driver of change (I)
Change in skills and roles	Prospective changes specifically in roles and skills (D)
Changes in the industry	Prospective changes in the industry as a whole (D)
Perception for the future	Perception for the future (optimist/pessimist) (D)

For the analysis, the participants were organized into three tiers, based on company size and footprint. In a summary section at the end of the analysis, I will seek to determine which features are shared and which features are not. Considering that two of the participants had experience both in training translators and in managing language service providers, an additional section of analysis is added specifically on the topic of the quality of training and communication between companies and academic institutions.

The exchanges with all participants were very open and productive. However, in the section where they were asked about the quality of translator training at higher education institutions in Portugal, there was stark contrast across the board. Some shared their thoughts quite candidly, while others put a significant effort into trying to be as

polite as possible about their criticisms. Here I feel that my presence, as an element of academia, may have changed what they normally would say.

Chapter 4. Results

The following sections present the results of the study. The study contains a cross-sectional dimension, providing a snapshot for 2017, and a longitudinal dimension for select items where trends over time were found to provide relevant input.

The results regarding the translator-training landscape focus on the competences that can be acquired in formal programs in translation or applied languages with a significant track in translation in higher-education institutions in Portugal. These competences are seen as signals in the labor market that companies may observe when making recruitment choices.

I then turn to the findings on the translation industry in Portugal. Here I describe how the social and economic fabric of the sector has an impact on the business decisions of each individual agent, and how they interact.

The following section presents the results of the survey of ads and the survey questionnaire I used to determine the methods used in the assessment of prospective translators. This particularly concerns how signals are observed and valued from the perspective of the recruiter.

The final section in this in this chapter presents the results of the interviews with stakeholders. The interviews were designed to elicit views that cannot be captured in the quantitative format of the previous sections. Some links to the questionnaire survey are also established to determine how certain recruitment practices may have evolved.

4.1 Mapping the translator-training landscape

The Portuguese higher education system is comprised of universities and polytechnic institutes, which can be private or public. Universities award diplomas at BA, MA, and PhD levels, whereas polytechnic institutes are restricted to BA and MA degrees. Public institutions have an overwhelming proportion of the total student population. According to Pordata, in 2017 there were 361 943 students in higher education, of which 302 596 in the public system and 59 347 in private institutions.

Applicants to first-cycle programs in the public system must take part in a national selection process. Applicants are ranked according to their secondary-school leaving grade average. Applications for private institutions take place at local institutional level.

For second- and third-cycle programs, all admissions are handled by each higher education institution individually.

All programs are subject to *numerus clausus*, a system that limits the maximum number of applicants that can be admitted. As a consequence, courses in high demand often have a huge disproportion of applicants relative to the number of places available. First-cycle programs in translation or applied languages with a track in translation do comparatively well within their field. Based on the results for the first round of the 2017 national selection process, I can see translation programs on par with other foreign-language and literature programs at Universidade de Lisboa or Universidade de Aveiro. The translation program at Universidade Nova de Lisboa and the applied languages programs at Universidade do Minho and Universidade do Porto require significantly higher grade averages from applicants than foreign language and literature programs at the same institutions. The program at Universidade do Porto is a clear standout in the national panorama, with a minimum entry grade of as high as 17.1 (on a scale of 1-20).

There are seven accredited undergraduate programs in Portugal focusing specifically on translation. There are three more undergraduate programs in applied languages with relevant tracks in translation. Two of the accredited undergraduate programs were not taking new students in 2017, and they are also not listed in the DGEEC statistics of enrolments. This leads us to the assumption that they are inactive.

At Master's level, there are thirteen accredited programs in Portugal focusing specifically on translation. Some of these courses have several language or thematic variations.

Finally, there are three doctoral programs in Portugal focusing specifically on translation studies. Two of the programs are run jointly by two or more universities.

Most of these programs are classified by DGEEC under the category of Humanities/Foreign Languages and Literatures, although two belong to the category of Business Sciences/Secretarial and Administrative Work.

According to the statistics released by DGEEC for the academic year 2015-16, the student population of the above programs was 1 837⁴: 1 409 students were in first-cycle

⁴ These numbers do not reflect the second-cycle program Mestrado em Tradução e Interpretação de Conferências - Especialização em Tradução, jointly organized by Universidade de Lisboa and Instituto Politécnico de Macau. The data on this program are not made available by the Directorate-General for Statistics in Education and Science.

programs (486 male/923 female), 409 in second-cycle programs (110 male/299 female), and 19 students in third-cycle programs (2 male/17 female).

In the 2015-2016 academic year, 259 students (72 male/187 female) graduated from first-cycle programs in translation or applied languages with a significant track in translation, and 92 students (22 male/70 female) finished their second-cycle programs in translation. No students were reported to have finished third-cycle programs. In that academic year, 424 students were admitted to first-cycle programs through the national selection process.

Under the ECTS system, the first cycle of studies has a duration of six to eight semesters and totals 180-240 ECTS credits. The second cycle of studies has a duration of three to four semesters and totals 90-120 ECTS credits. The third cycle of studies has a duration of six to eight semesters and totals 18-240 ECTS credits.

Tuition fees for the public institutions are set by law for all first-cycle programs. For second and third-cycle programs, institutions are free to set a fee schedule individually for each program. Private institutions may set their own fee schedule for programs in all three cycles.

Table 6 provides a full listing of all programs considered for this study.

Table 6. Overview of programs

Institution	Public/Private	Name of program	Cycle	ECTS
Instituto Politécnico de Leiria - Escola Superior de Educação e Ciências Sociais	Public	Tradução e Interpretação: Português/Chinês - Chinês/Português	First cycle (Licenciatura)	240
Instituto Politécnico do Porto - Instituto Superior de Contabilidade e Administração do Porto	Public	Assessoria e Tradução	First cycle (Licenciatura)	180
Universidade Católica Portuguesa - Faculdade de Ciências Humanas	Private	Línguas Estrangeiras Aplicadas	First cycle (Licenciatura)	180
Universidade de Aveiro	Public	Tradução	First cycle (Licenciatura)	180
Universidade de Lisboa - Faculdade de Letras	Public	Tradução	First cycle (Licenciatura)	180
Universidade do Minho	Public	Línguas Aplicadas	First cycle (Licenciatura)	180
Universidade do Porto - Faculdade de Letras	Public	Línguas Aplicadas	First cycle (Licenciatura)	180
Universidade Nova de Lisboa - Faculdade de Ciências Sociais e Humanas	Public	Tradução	First cycle (Licenciatura)	180
Instituto Politécnico de Bragança - Escola Superior de Educação de Bragança	Public	Tradução	Second cycle (Mestrado)	120
Instituto Politécnico de Macau/Universidade de Lisboa - Faculdade de Letras	Public	Tradução e Interpretação de Conferências - Especialização em Tradução	Second cycle (Mestrado)	120
Instituto Politécnico do Porto - Instituto Superior de Contabilidade e Administração do Porto	Public	Tradução e Interpretação Especializadas	Second cycle (Mestrado)	120
Universidade Católica Portuguesa - Faculdade de Ciências Humanas	Private	Tradução e Culturas Comparadas	Second cycle (Mestrado)	120
Universidade de Aveiro	Public	Tradução Especializada	Second cycle (Mestrado)	120
Universidade de Coimbra - Faculdade de Letras	Public	Tradução	Second cycle (Mestrado)	120
Universidade de Évora - Escola de Ciências Sociais	Public	Línguas e Linguística: Tradução e Ciências da Linguagem	Second cycle (Mestrado)	120
Universidade de Lisboa - Faculdade de Letras	Public	Tradução	Second cycle (Mestrado)	120
Universidade do Minho	Public	Estudos Interculturais Português/Chinês: Tradução	Second cycle (Mestrado)	120
Universidade do Minho	Public	Tradução e Comunicação Multilíngue	Second cycle (Mestrado)	120
Universidade do Porto - Faculdade de Letras	Public	Tradução e Serviços Linguísticos	Second cycle (Mestrado)	120
Universidade dos Açores - Ponta Delgada	Public	Tradução e Assessoria Linguística	Second cycle (Mestrado)	120
Universidade Nova de Lisboa - Faculdade de Ciências Sociais e Humanas	Public	Tradução	Second cycle (Mestrado)	90
Universidade de Coimbra - Faculdade de Letras	Public	Línguas Modernas: Culturas, Literaturas, Tradução	Third cycle (Doutoramento)	240
Universidade de Lisboa/Universidade Nova de Lisboa/Universidade Católica Portuguesa	Public	Estudos de Tradução (associação)	Third cycle (Doutoramento)	180
Universidade Nova de Lisboa/Universidade de Aveiro	Public	Tradução e Terminologia	Third cycle (Doutoramento)	180

4.1.1 First-cycle programs

Upon successful completion of first-cycle studies, students are awarded the degree of “licenciado”. This is the equivalent of a Bachelor's degree.

Nearly all first cycle programs have a duration of six semesters (180 ECTS). The exception is the program *Tradução e Interpretação Português/Chinês - Chinês/Português* at Instituto Politécnico de Leiria, which lasts eight semesters (240 ECTS).

Based on the methodology laid out in section 3.6, I have used a modified version of the EMT framework as a benchmark for all cycles across this study. Essentially, the EMT framework was expanded to accommodate competences commonly found in these programs and not directly represented in the framework. Each course, or curricular unit, was assigned a primary competence based on its description or syllabus. I then used the ECTS credits to determine the weight of each competence in each program. Table 7 provides an overview of the weight of each competence across all programs.

Table 7. Total ECTS in translator training programs (1st cycle)

Competence	Total ECTS	% ECTS
Information mining	24	1.60
Intercultural	154	10.25
Language 1	73	4.86
Language 2/3	588	39.12
Other	238	15.83
Research	34.5	2.30
Technological	60	3.99
Thematic	30	2.00
TSP - Interpersonal	0	0.00
TSP - Production	295.5	19.66
TSP - Production into L2	6	0.40
Total	1 503	100.00

The EMT project was originally designed to be a common frame of reference for second-cycle programs. Its framework of competences sets out goals for translator-training programs that higher education institutions can adapt to the local context. It lists and describes six main interdependent areas of competence as a minimum requirement: Language, Intercultural, Information mining, Technological, Thematic, and Translation service provision. It anticipates that other specific competences may be added.

The EMT competence wheel displays a proportional distribution of competences. However, the table above indicates quite significant asymmetries. The Language competence, here split into L1 (first language) and L2/L2 (second/third language), accounts for nearly 44% of all ECTS taught in first-cycle programs. The considerable

weight of L2/3 competence is unsurprising, as students coming out of secondary school are expected to have CEFR level B2 for their second language (L2), usually English, and A2/B1 for their third language (L3). Spanish, French, and German are common L3 options in secondary school. Chinese is offered as L3 at select secondary schools. The EMT framework presupposes at least CEFR level C1 to be attained before accessing second-cycle programs.

Translation service provision competence is the next most relevant primary competence in the programs included in this study. Conversely, curricular units with Translation service provision competence into L2 at their core are second to last.

Intercultural competence accounts for 10.25% of all ECTS. This is the first category encompassing largely theoretical courses. Its reduced weight is an indication of the mostly practical nature of first-cycle programs included in this study.

Accounting for just under 4% of ECTS, Technological competence is represented in almost all programs. Research (2.30% of ECTS) is a primary competence of courses in only a few programs and is mostly found in curricular units related to research methodology or seminars on translation, usually in the final year of the program. In some cases, students have the option of replacing these seminars with an internship.

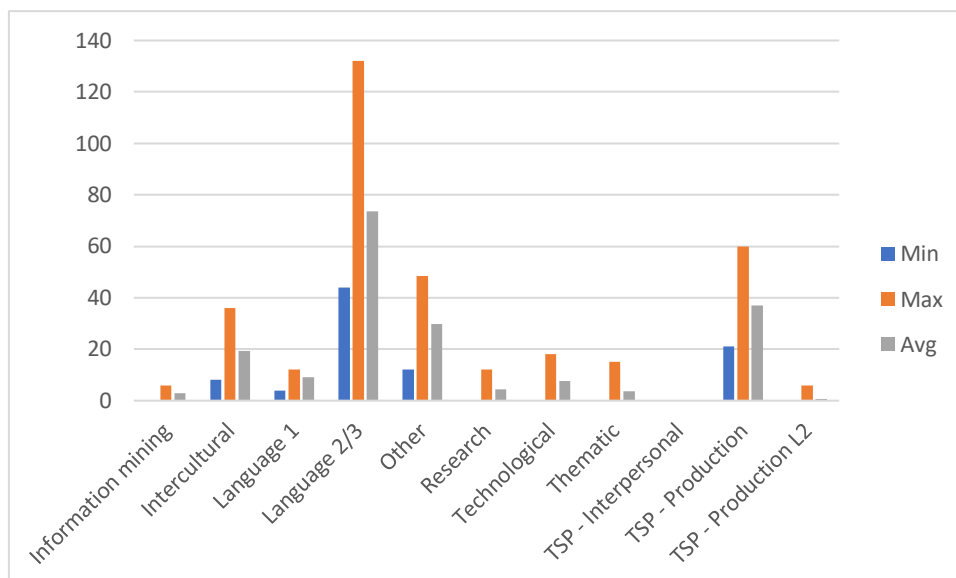
Information mining represents 1.60% of all ECTS and is a competence closely tied with curricular units on terminology.

Thematic competence (2%) is only explicitly found in courses like introduction to law or economics at Universidade do Minho and Instituto Politécnico do Porto.

There is no specific course for the development of the Translation service provision – Interpersonal competence. In first-cycle programs, teaching students how to handle clients, manage projects or work in a simulated team environment is not signaled as a priority in any institution.

Finally, at 15.83%, the Other category represents a very significant portion of ECTS in this study. It includes courses that do not fall under other categories or elective courses where the student has a wide array of choices that cannot be brought under other categories. They range from creative writing to statistics, reflecting not only the diverse nature of the programs but also of the institutions. They also enable a degree of flexibility in the learning path of students. Figure 5 summarizes this variation.

Figure 5. Minimum, maximum, and average ECTS per competence (1st cycle)



There is significant variation across programs regarding the weight of each competence. L1 is where the least distance from mean is found, and there are one or two courses to develop L1 competence in all programs. L2/3 competence is at the other end of the spectrum; not only is it the competence with the most weight of all but also the one where the widest variation is to be found. The clear standout is the program *Tradução e Interpretação Português/Chinês - Chinês/Português* with 132 ECTS (55%) devoted to L2 due to the fact that students are assumed to be learning Chinese from the very basics over a four-year period. This is the only first-cycle program with a duration of eight semesters (240 ECTS). All other programs range from 44 to 84 ECTS for L2/3.

Translation production competence ranges from 21 to 60 ECTS across programs, with an average of 36.94. The highest value is found in Universidade Nova de Lisboa and the lowest in Instituto Politécnico do Porto. The former is a program dedicated exclusively to translation while the latter focuses on translation, interpreting and secretarial work.

Instituto Politécnico do Porto is also the institution where the category Other has the most significant weight. The diversity of training that this course aims to provide explains the relevant percentage of ECTS (26.94%) that cannot be assigned to specific competences in the benchmark based on the EMT framework. Universidade de Aveiro and Universidade Nova de Lisboa are the programs with the fewest options outside of the benchmark with only 12 ECTS in the Other category. At Nova, students have two free

electives; in Aveiro students must choose from a selection of courses on Latin, Portuguese culture or European literatures.

The Intercultural competence is more prevalent at universities like Porto, Lisboa, Nova de Lisboa, and Aveiro (above 10%), and less so in the polytechnic institutes of Leiria and Porto.

Universidade de Aveiro has the program with the most weight of Technological competence (18 ECTS), followed by Instituto Politécnico do Porto (12 ECTS). Most other programs range from five to seven ECTS for this competence.

The Thematic category is only found in two programs: *Línguas Aplicadas* at Universidade do Minho and *Assessoria e Tradução* at Instituto Politécnico do Porto. In both cases, students have courses like introduction to law or accounting.

Courses emphasizing the Research competence are only found in the programs taught at Universidade Nova de Lisboa (translation seminar, 12 ECTS) and Universidade Católica Portuguesa (research methodology, three ECTS). At Universidade de Lisboa (12 ECTS), students have the option of taking a seminar or doing an internship. The program at Instituto Politécnico do Porto has the option of a project or an internship (seven and a half ECTS) during the final semester.

Information mining is present in four of the eight programs but never exceeding six ECTS. TSP - Production into L2 is only explicitly taught in one course at Universidade de Lisboa, and TSP – Interpersonal is not part of any program.

4.1.2 Second-cycle programs

Upon successful completion of second-cycle studies, students are awarded the degree of “mestre”. This is the equivalent of a Master's degree.

All second-cycle programs except the *Mestrado em Tradução* at Universidade Nova de Lisboa have a duration of four semesters (120 ECTS). The program at Universidade Nova de Lisboa has a shorter duration of three semesters (93 ECTS).

Using the same modified version of the EMT framework as a benchmark, I assigned each course, or curricular unit, a primary competence based on its description or syllabus. The ECTS credits are used to determine the weight of each competence. Table 8 provides an overview of the weight of each competence across all programs.

Table 8. Total ECTS in translator training programs (2nd cycle)

Competence	Total ECTS	% ECTS
Information mining	37.5	2.45%
Intercultural	201.5	13.14%
Language 1	49.5	3.23%
Language 2/3	34	2.22%
Other	41	2.67%
Research	655.5	42.76%
Technological	47	3.07%
Thematic	8	0.52%
TSP - Interpersonal	24	1.57%
TSP - Production	423	27.59%
TSP - Production into L2	12	0.78%
Total	1 533	100.00%

Two competences stand out from this analysis of 13 programs. As expected in programs for advanced training of translation professionals, Translation service provision – Production accounts for a relevant proportion of all ECTS: 27.59%. It is also a significant increase relative to first-cycle programs. The true standout, however, is Research: it accounts for 42.76% of all ECTS across programs, ranging from 35% to 50%.

The considerable weight of Research in second-cycle programs is not surprising given the local context. Article 20 of Decree-Law 74/2006, as amended, establishes that second-cycle programs must incorporate a dissertation, a project, or a professional internship worth a minimum of 30 ECTS. Even students who choose the professional internship must submit a final report that is subsequently presented in an open session.

Intercultural competence accounts for 13.14% of all ECTS, mostly encompassing courses in the fields of linguistics and translation theory. Although it represents the third largest competence in terms of credits, it has a limited weight in the second-cycle programs included in this study.

L1 and L2/3 competences in second-cycle programs account for little over 5%, in sharp contrast with the panorama in first-cycle programs. A similarly steep drop is found in the courses assigned to the Other category (2.67%), indicating a more rigid and focused structure of the programs. The weight of TSP - Production into L2 is marginal (0.78%) and this competence is only developed at Universidade de Coimbra.

The remaining competences (Information mining, Technological, Thematic, TSP – Interpersonal) concern softer or more practical skills but, on aggregate, they account for only 7.6% of all ECTS. Technological competence has the widest distribution across programs, and Thematic the most limited.

Figure 6. Minimum, maximum, and average ECTS per competence (2nd cycle)

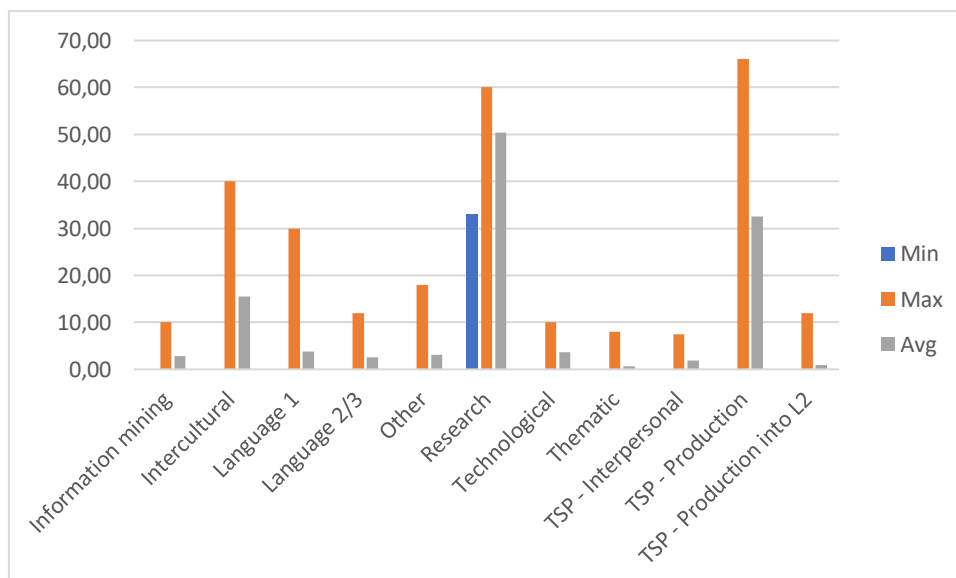


Figure 6 shows the degree of variation of ECTS devoted to the different competences across all programs included in this study. The average ECTS column signals a global distribution of ECTS across competences along the lines of what was seen in the previous table. However, the variation between minimum and maximum ECTS indicates that programs have quite different approaches to the structuring of their programs. Research is the only ubiquitous competence. All other competences range from zero to 66 ECTS.

A closer analysis of the program structures indicates that this variation is, to a large extent, a result of specialization. At Universidade de Évora and Universidade dos Açores, Research accounts for 50% of ECTS and Intercultural competence encompasses 20% and 18.75% of ECTS, respectively. These two programs focus on a more theoretical approach, as shown also by the limited weight of TSP - Production competence: 15% at Universidade de Évora and 18.75% Universidade dos Açores.

At the other end of the spectrum is Instituto Politécnico do Porto. The program *Mestrado em Tradução e Interpretação Especializadas* has 66 ECTS in courses where TSP – Production is the primary competence, Research accounts for 42 ECTS and it is the program with the least weight of Research competence (35%). The other primary competence represented in the program is TSP – Interpersonal with a course in translation project management (6 ECTS.).

Two programs deserve a closer look.

At Universidade do Minho, the program *Estudos Interculturais Português/Chinês: Tradução, Formação e Comunicação Empresarial* stands out because TSP - Production has a zero weighing as a primary competence. It is partially developed as a section of other courses. This is compatible with the program aims and description, although the naming of the program might suggest otherwise.

The other program worth a closer analysis is *Mestrado em Tradução e Serviços Linguísticos* at Universidade do Porto. This is only program that was an EMT member in 2017, and it can be seen as an example of implementation of the EMT framework within the Portuguese higher-education system. Table 9 compares the distribution of ECTS at Universidade do Porto with the national ECTS average across all programs included in the study.

Table 9. ECTS distribution at Universidade do Porto vs national average

	% ECTS UP	Total ECTS UP	National ECTS Avg
Information mining	2.50%	3	2.88
Intercultural	22.50%	27	15.50
Language 1	5.00%	6	3.81
Language 2/3	10.00%	12	2.62
Other	0.00%	0	3.15
Research	37.50%	45	50.42
Technological	5.00%	6	3.62
Thematic	0.00%	0	0.62
TSP - Interpersonal	0.00%	0	1.85
TSP - Production	17.50%	21	32.54
TSP - Production into L2	0.00%	0	0.92
Total	100%	120	117.92

The program at Universidade do Porto has Research as its main competence (45 ECTS) but below the national average. Intercultural competence is the next most relevant competence in this program: at 27 ECTS, it almost doubles the national average. TSP – Production comes in third place, 11 ECTS below the national average. Language 2/3 has a significant weight in this program relative to the national average, and Language 1 also features prominently relative to the national average. Technological competence has 6 ECTS vs a national average of 3.62 ECTS. Finally, Information mining is on par with the national average with 3 ECTS.

4.1.3 Third-cycle programs

Upon successful completion of third-cycle studies, students are awarded the degree of “doutor”. This is the equivalent of a PhD degree.

Universidade de Coimbra's doctoral program has a duration of eight semesters (240 ECTS). The joint program run by Universidade Nova de Lisboa, Universidade de Lisboa, and Universidade Católica Portuguesa has a duration of six semesters (180 ECTS), and the joint program Tradução e Terminologia by Universidade de Aveiro and Universidade Nova de Lisboa also has a duration of six semesters (180 ECTS).

In line with expectations, these three programs devote the entirety of their ECTS to Research.

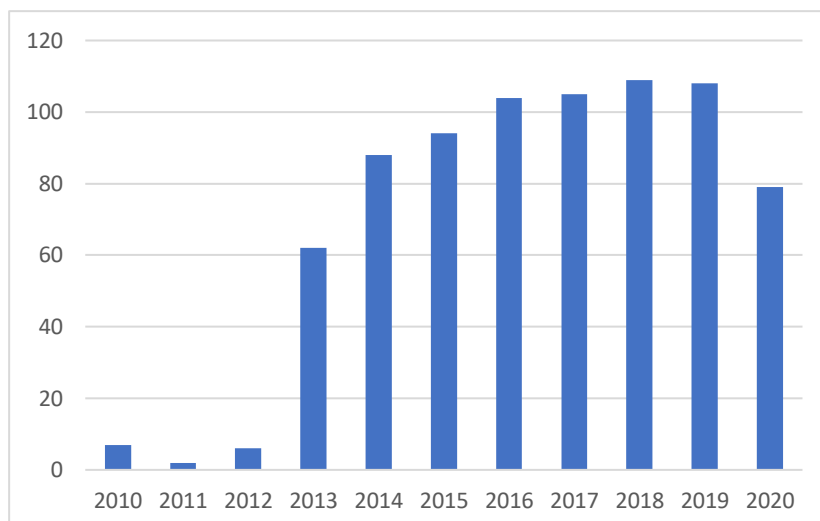
4.1.4 Production of academic works

Tertiary institutions produce highly qualified human resources. However, considering the strong weight of Research competence, especially from second-cycle programs onwards, I deem it relevant to look into the output of academic works from the programs above. For this I turn to the National Registry for Theses and Dissertations (RENATES), which holds records for doctoral theses since 1970 and Master's theses since 2013. I would note that I managed to search and find Master's theses records from 2010 onwards.

In this repository, I searched for PhD theses, Master's theses, projects, and internship reports. The current data layout of RENATES does not allow for accurate segregation of Master's theses, projects and internship reports.

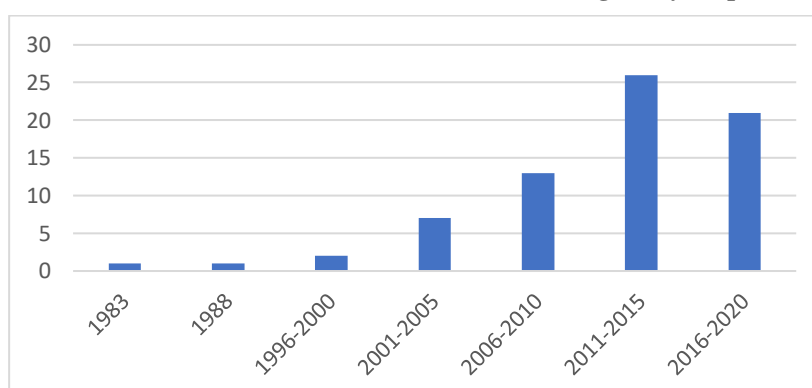
For MA theses, projects, and internship reports I searched for programs with "tradução" in the name and I had to narrow the search by year, because RENATES has a limit of 200 results per query. The first theses and reports on record for the above programs date back to 2010, and for the first three years RENATES only lists graduates from Instituto Politécnico do Porto. In 2013, there is a significant jump to 62 theses, projects, and internship reports. The numbers continue to grow strongly until 2016, where they stabilize around the 100-110 theses, projects, or internship reports finished per year. More recently, there was a steep drop in 2020, potentially owing to the pandemic or delays in data gathering processes. Since the reason for the abrupt change is unknown, I would recommend caution regarding any conclusion based on the figures for 2020. In total, 764 theses, projects, and internship reports were completed since 2010. Figure 7 shows this evolution in detail.

Figure 7. Master’s theses, projects, and internships finished in Portugal per year



Turning to doctoral theses, a similar trend is visible in the number of completed theses. Figure 8 depicts the evolution over four decades, with a clear acceleration from 2010 onwards.

Figure 8. Doctoral theses in the field of translation in Portugal (5-year periods)



For doctoral theses, I used the keyword “tradução” for searching in all text fields. This is necessary in order to capture meaningful results for an expanded timeframe. Doctoral studies are usually prolonged in time, and the programs running in 2017 had not had sufficient time to produce theses since their inception.

Records include theses classified under Languages and Literatures, Humanities, Education Sciences, and Computing. They were reviewed manually to expunge them from false positives unrelated to the specific type of translation of interest for this study (e.g. mRNA translation). RENATES lists 71 theses completed in Portugal in the period

1983-2020. It lists further five theses finished abroad but registered in Portugal from 2005 to 2015, all of which involve Universidade de Vigo as a partner.

There was a clear acceleration in the number of doctoral theses in the field of translation finished from 2001 onwards. The inception of Bachelor's programs and, subsequently, Master's programs in translation around this period created a demand for teaching staff holding a PhD. The creation of doctoral programs in Translation Studies also brought more visibility to translation as an area of research. This trend was influenced positively by the adoption of the Bologna Process.

This is also echoed in the number of Master's theses, projects, and internships finished in Portugal from 2010 onwards, coinciding with the first batches of graduates from newly-created Master's programs where theses, projects, or internships are a requirement for obtaining the degree.

I can thus conclude that translation attracts a growing number of students to all cycles, and scientific output in the field is also rising. This promotes knowledge in the field and it is also a sign of the increasingly specialized qualifications of teaching staff.

4.2 Mapping the translation industry

Portugal has a robust national statistical system that collects and produces statistical information for use by other entities, e.g. in planning and research. In this study, I have used data from two key entities in the national statistical system: Statistics Portugal and the Bank of Portugal. For European data, I have used data from Eurostat.

I would note that data provided by these entities may display a lag of up to two years for reasons inherent to the collection and processing of data.

For example, in early 2017, most of the data regarding companies and the industry in Portugal reported back to the calendar year 2015 because the data made available by Statistics Portugal and the Bank of Portugal is based largely on IES. This is a mandatory reporting requirement for companies based in Portugal that is due in July every year. This means that data relative to 2015 were submitted by companies in July 2016, and subsequently transferred to and processed by Statistics Portugal for public release. Therefore, in early 2017 only the data relative to 2015 are available. I used this data for preliminary analysis in this study, but the information reported below refers specifically to the calendar year 2017.

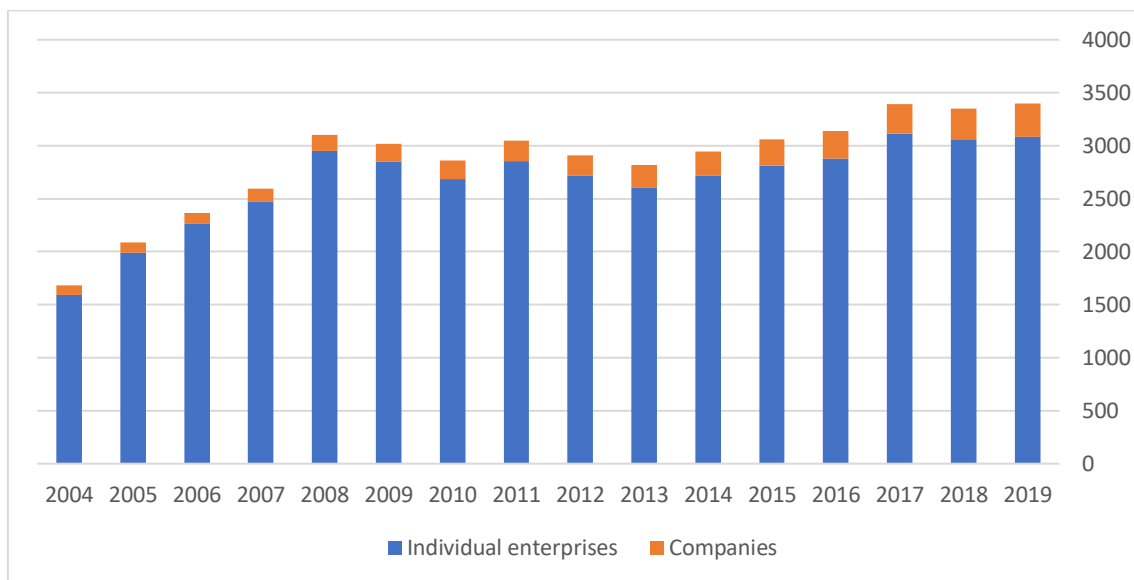
Although Statistics Portugal, the Bank of Portugal, and other entities share the same basic set of data, they have their own dissemination mechanisms and may combine the data in different ways, leading to different results. For example, Statistics Portugal and the Bank of Portugal do not see eye to eye on the exact number of companies.

4.2.1 Translation companies

In the mid-2000s, Ferreira-Alves carried out a sociological survey of translation agencies operating in Portugal. He concluded that companies “are generally small in size and are run by a few people, often linked by family ties [...], the number of people that constitute the hard core of these companies varies between two and ten” (2012, p. 237). More than ten years later, the picture has not changed significantly, and the translation industry in Portugal is still largely populated by small operators.

Statistics Portugal divides these operators, or enterprises, into two categories: individual enterprises (i.e. independent professionals) and companies. Figure 9, based on data from Statistics Portugal, shows the evolution in the number of translation companies and individual enterprises from 2004 to 2019.

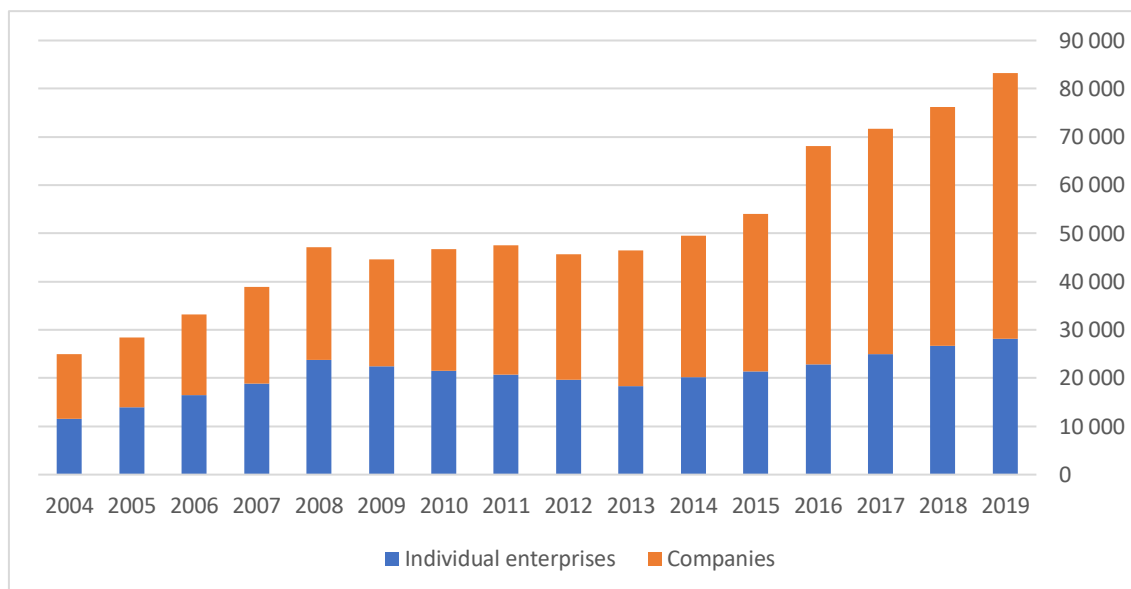
Figure 9. Number of translation companies and individual enterprises (Statistics Portugal)



After a period of rapid growth between 2004 and 2008, the sector saw a decrease in the number of translation companies and individual enterprises until 2010 as a result of the global financial crisis. It resumed growth in 2011, only to falter in the two following years during the period of the sovereign debt crisis. Recovery began in 2014 but the sector stagnated from 2017 to 2019. The proportion of companies relative to the number of individual enterprises has increased over the last decade.

Interestingly, as shown in Figure 10, based on data from Statistics Portugal, the industry turnover kept track with the number of companies and individual enterprises until 2015 but, instead of stagnating, it exploded by nearly 30% and has been growing at a steady pace since then. The share of turnover attributable to companies has also expanded from approximately 50% in the mid-2000s to 66.2% in 2019. This signals an increasingly concentrated market.

Figure 10. Turnover of translation companies and individual enterprises (€ thousand)



The translation industry in Portugal represents a very small fraction of the European market: a little over one percent in terms of turnover and number of companies. The following tables are based on Eurostat data for NACE_R2 economic activity M743 - Translation and interpretation activities, which currently go only until 2018. NACE and CAE are harmonized and fully comparable, although minor differences were noted between the two data sets.

Table 10 presents the evolution in the number of enterprises from 2011 to 2018 in the European Union (28), including individual enterprises and companies, in each employment size category. Overall growth can be observed across all categories of size. Growth is more constant across smaller enterprises, whereas larger companies, especially those with more than twenty persons employed, saw some fluctuations over the last decade.

Table 10. Number of enterprises (EU 28) per persons employed

Year	Total	250+	50 -249	20-49	10-19	2-9	0-1
2011	263 748	75	541	1 437	3 146	46 601	211 948
2012	273 793	73	534	1 726	3 313	45 517	222 630
2013	284 775	69	559	1 641	3 406	48 713	230 386
2014	301 902	72	520	1 446	3 624	49 576	246 663
2015	307 512	73	547	1 523	3 527	51 649	250 191
2016	347 638	80	614	1 584	4 162	65 447	275 751
2017	354 233	84	627	1 733	4 013	62 536	285 240
2018	371 087	86	670	1 827	4 297	63 694	300 514

Table 11 presents the evolution in the number of enterprises from 2011 to 2018 in Portugal, including individual enterprises and companies in each employment size

category. Here, too, growth can be observed across all categories of size. Fluctuations in the upward trend are also visible in larger companies.

Table 11. Number of enterprises (Portugal) per persons employed

Year	Total	250+	50-249	20-49	10-19	2-9	0-1
2011	2 476	0	7	25	51	770	1 623
2012	2 527	0	8	23	50	742	1 704
2013	2 719	1	6	24	48	735	1 905
2014	2 901	2	8	26	54	766	2 045
2015	3 131	2	12	23	57	828	2 209
2016	3 322	2	13	26	58	895	2 328
2017	3 592	2	13	22	81	899	2 575
2018	3 835	2	14	30	84	958	2 747

On the whole, Portugal has more significant growth rates than the EU aggregate at the level of individual enterprises and total number of enterprises. However, the growth rates across categories are quite uneven, with very strong growth in larger categories. The numbers for the latter should be read with some care, however, because they are so low that any fluctuation has a major impact.

Once again, the more interesting trends can be observed in the turnovers (Table 12). Using Eurostat data, I compiled a table of the turnover evolution across the different categories of size. In contrast with the data on the number of enterprises, the data on turnover is quite incomplete on the Eurostat database. Data are often flagged as confidential (c) or with a colon, which means not available. In Table 12 I use only the colon (not available). Nevertheless, it provides some important clues as to the evolution of the sector and how turnover is split among operators of different sizes.

Table 12. Turnover of enterprises in the EU (€ million) per persons employed

Year	Total	250+	50-249	20-49	10-19	2-9	0-1
2011	5 047.8	:	457.7	562.0	:	1 169.8	2 207.2
2012	:	:	561.4	610.5	488.3	1 344.1	2 156.6
2013	:	145.6	615.0	563.2	448.3	:	2 228.6
2014	:	:	629.8	569.9	532.9	1 316.5	2 273.7
2015	:	274.5	714.8	630.7	:	1 322.4	2 249.3
2016	6 000.0	282.6	870.3	:	:	1 417.2	:
2017	:	:	790.1	814.0	553.8	:	2 556.6
2018	:	462.9	:	:	593.4	1 530.5	2 715.1

Table 12 presents the evolution in the turnover of enterprises from 2011 to 2018 in the European Union (28), including individual enterprises and companies in each employment size category. Overall growth can be observed across all categories of size. However, larger companies stand out. In particular companies with more than 250 employees saw spectacular growth and more than tripled their turnover, while over the same period the number of companies in this category grew from 69 in 2013 to 86 in

2018. Large players are clearly gaining market share in the EU. At the other end of the spectrum, growth rates of 20-30% can be observed in the smaller categories, with some periods of negative growth over decade.

Table 13. Turnover of enterprises in Portugal (€ million) per persons employed

Year	Total	250+	50 -249	20-49	10-19	2-9	0-1
2011	47.6	0.0	:	:	4.8	13.6	24.2
2012	45.7	0.0	:	:	5.3	11.7	23.1
2013	46.5	0.0	0.0	6.3	4.7	13.0	22.4
2014	49.6	0.0	:	:	4.9	13.9	24.7
2015	54.0	0.0	:	:	5.4	14.7	26.4
2016	68.2	0.0	:	:	8.3	14.6	28.5
2017	71.7	0.0	:	:	7.6	15.9	30.1
2018	76.2	0.0	:	:	9.6	15.6	32.6

Table 13 presents the evolution of the turnover of enterprises from 2011 to 2018 in Portugal, including individual enterprises and companies in each employment size category. The most striking aspect is the mismatch with Table 11, where enterprises across all categories of size can be found. Here there are almost no data on companies with more than 19 persons employed. A closer look at the individual Eurostat tables enables me to determine that those data are tagged as confidential.

However, the remaining data allow for some comparisons. Here, too, growth can be observed across all categories of size for which information is available. Overall market growth reached 60% from 2011 to 2018 in terms of turnover, whereas in the smaller-sized enterprises growth was more modest: 34% turnover growth in individual enterprises and 14% in companies with 2 to 9 employees. In the category of 10 to 19 persons employed, turnover grew by 100%.

I would highlight here that the turnover growth has outpaced growth rate in number of enterprises. However, as seen in Table 14 and Table 15, the distribution of growth is uneven in both the number of enterprises and turnover. For instance, individual enterprises grew in Portugal by 69.25% over the period, whereas turnover in this category grew only 37.71%. For companies with 10-19 persons employed, the largest for which data are available from Eurostat, the growth in number of enterprises (64.71%) is clearly outpaced by growth in turnover (100%).

The figures at EU (28) level also point in a similar direction, showing strong growth in the number of small enterprises that is not matched by growth in turnover. At the other end of the spectrum, growth rate in the number of enterprises is clearly outpaced by the growth in turnover.

Table 14. Enterprise number growth rate in the EU and Portugal (2011-2018)

Geography	Total	250+	50 -249	20-49	10-19	2-9	0-1
EU (28)	40.70%	14.67%	23.84%	27.14%	36.59%	36.68%	41.79%
Portugal	54.89%	100% ⁵	100.00%	20.00%	64.71%	24.42%	69.25%

Table 15. Enterprise turnover growth rate in the EU and Portugal (2011-2018)

Geography	Total	250+	50 -249	20-49	10-19	2-9	0-1
EU (28)	18.86%	217.93%	72.62%	44.84%	21.52%	30.83%	23.01%
Portugal	60.08%	N/A	N/A	N/A	100.00%	14.71%	34.71%

On average, this means that very small companies and individual enterprises are earning less, whereas very large companies are earning substantially more.

After seeing how the sector has evolved in Portugal and in Europe, I focus on 2017 as the basis for the snapshot of the industry. According to Statistics Portugal, there were 3392 enterprises in sector 74300 Translation and Interpreting Activities of CAE rev 3: 3117 were individual enterprises and 275 were companies.

Further financial analysis about companies can be obtained from the Bank of Portugal industry dashboard. As I have mentioned previously, the information released by Statistics Portugal and the Bank of Portugal does not match down to the unit. This mild methodological discrepancy is noticeable across the board but the resulting figures are proportional. As such, both datasets can be used and are comparable.

According to the industry dashboard published by the Bank of Portugal, there were 284 companies. Total turnover for companies in 2017 topped 48 million euros, with an average turnover of 169 100 euros. In this heavily concentrated industry, 80.6% of turnover is generated in the 20% largest organizations. Geographically, translation companies also were concentrated around the two largest cities: 56% in the Lisbon metropolitan area and 17.3% in the Oporto metropolitan area. In terms of size, however, microenterprises represented 93.66% of all companies, small enterprises accounted for 5.99%, and there was only one medium-sized enterprise.⁶

In 2017, the industry was export-oriented, with 63.42% of sales coming from exports, i.e. services provided to clients based in a foreign country. Most companies were

⁵ Growth rate calculated from 2013, because prior to this date there were no companies in this category during the relevant period.

⁶ Microenterprises are companies with fewer than ten employees and a yearly turnover or balance sheet under two million euros. Small enterprises are companies with fewer than 50 employees and a yearly turnover or balance sheet under ten million euros. Medium-sized enterprises are companies with fewer than 250 employees and a turnover under 50 million euros or a yearly balance sheet under 43 million euros.

under five years old (47.89%), but the bulk of turnover was generated by companies in the age bracket of 11 to 20 years (50.87%).

I also found high percentages of companies with persistent negative net income for the period (31.34 % in 2017; never below 24.89% in the previous five years) and negative equity⁷ (20.07% in 2017; never below 17.15% in the previous five years). Although these figures are below the national averages for all sectors, they paint a picture of a highly asymmetric industry with a limited number of large players producing the bulk of turnover and more geared towards profit, whereas at the other end there are very small operators having a hard time making ends meet.

4.2.2 Translators

As far as human resources are concerned, according to the Bank of Portugal data, translation companies employ 829 people, averaging three employees per company. The average yearly salary is around 16 000 euros. This number includes staff directly engaged in translation activities but also managerial, administrative staff, and support staff. Using the ratio I alluded to in section 3.7.2, I come to 448 professionals directly engaged in translation employed at translation companies.

The number of independent professionals in the sector can easily be determined using the statistical tables provided by Statistics Portugal. As seen in Figure 9, the number of individual enterprises in the sector is 3 117. If I then divide the total turnover of individual enterprises by the number of individual enterprises, I come to a figure of yearly gross income just shy of 8 000 euros. This corroborates Ferreira-Alves' findings that the majority of the professionals had translation as a part-time, secondary, or occasional activity (2011, p. 284), as it represents an income level below the national minimum salary.

Assuming 16 000 euros as the average full-time income of a salaried translator in Portugal in 2017, the average income of 8 000 euros of freelance translators is half the full-time equivalent income. Using the full-time salary as a benchmark, I can assume that freelance translators are working at 50% capacity on average. Having 3 117 independent

⁷ Negative equity occurs when the assets of a company are not enough to meet the liabilities. Persistent negative equity is often an indication of bankruptcy.

translators working at 50% capacity equates to 1 554 independent translators working at 100% capacity. If I add the 448 translators estimated working in-house, I come to a full-time income equivalent of 2 000 translators.

Translator associations and membership figures show particular trends. The long-established Sindicato Nacional de Actividade Turística, Tradutores e Intérpretes (SNATTI) has a very limited number of translation and interpreting professionals among its membership, as it is more geared towards interpreter-guides. In 2017, only nine interpreters and 12 translators were listed as members. In 2021, five interpreters and two translators were listed as members.

Associação Portuguesa de Tradutores (APT) is the incumbent translator association. According to Magalhães (1996, p. 213), long-running president of APT until 2014, this association had 600 members in 1995. In 2017, it had around 300 members. Membership has remained stable in subsequent years in this association.

Associação Portuguesa de Tradutores e Intérpretes (APTRAD) is the newcomer. Established in 2015, it had 376 members in 2017. By 2021, this number had grown to 599.

There are two more associations, which are highly specialized. Associação Portuguesa de Intérpretes de Conferência (APIC) is for conference interpreters, and it has a membership of around 50 professionals. Associação Portuguesa de Intérpretes e Tradutores Jurídicos (APITJUR) is an association of lawyer-linguists interpreters but it has no known activity.

The variation in total membership does not seem to echo the variation in the number of professionals. Except for APTRAD, the associations have either shrunk or stagnated in membership size, whereas the number of translators has been growing steadily as seen in Figure 9. This aspect can be confirmed once the official statistics for 2020 and 2021 have been released.

Nevertheless, it is a very significant indication that cohesion in the sector is rising rapidly as shown by the sharp rise in the number of members of APTRAD with little attrition in other associations. No new associations have been created since 2015, which might also be a sign that the industry is not becoming more segmented or fragmented.

4.3 Determining methods used in the assessment of prospective translators

In this section, I focus on the results of the survey of job advertisements and the subsequent survey questionnaire to companies.

The survey of job advertisements was aimed at determining competences and other skills required by employers when searching for perspective translators.

The survey questionnaire was designed to gather information on the methods used to minimize the information asymmetry and determine how companies rate the signals received from applicants in terms of relevance. These results also shed light on the trust mechanisms across the industry by establishing which competences are tested and which competences are signaled.

4.3.1 Survey of ads

Job advertisements tend to be short and concise. They contain a short description of the position to be filled, a profile featuring the characteristics sought in candidates, and sometimes a reference to remuneration. Most job advertisements are published in electronic format in specialized websites.

I collected a relevant, non-exhaustive corpus of the job opportunities for translators in Portugal available in mid-March 2017. The corpus consists of 28 ads, which were collected on March 16 and 17, 2017.

The first batch of fifteen job advertisements that I analyzed was obtained from online resources that are relevant for the Portuguese market: Sapo Emprego e Expresso Emprego. Two of the advertisements were for freelance positions, the remaining thirteen were for in-house positions. Five of these positions were published by the employer, whereas the remaining ten were published by companies specialized in recruiting human resources (e.g. Randstad or Hays). Twelve of these positions are for translators, two are for translation project management positions, and one combines teaching and translating Chinese. Three of the positions on offer involve translating from Portuguese into other languages, the remaining have Portuguese as the target language.

Regarding the competences or skills mentioned in the ads, Source language is mentioned most frequently in ads for translators working into Portuguese. Conversely, Target language is only mentioned in ads seeking translators working into other languages. The degree of proficiency expected from candidates is expressed in different ways,

ranging from a CEFR level C2 to “fluência” (fluency), “excelentes conhecimentos” (excellent knowledge), or “domínio” (command). In two cases, candidates are expected to have been born or to have lived for a long period in the US or the UK.

No ad refers to Intercultural, Information Mining, or Thematic competences. Nine ads mention Technological competence as a requirement but mostly in vague terms. Only three mention translation tools specifically. Translation service provision – Production is only referred to in four ads: in two cases the adjective “perfeccionista nas traduções” (perfectionist in translations) is used, another ad calls for a linguist with a vocation (sic) for translating, and the last of the four ads specifies that the candidate should be able to translate documents from German into English or German into Portuguese.

Translation service provision – Interpersonal competence is where companies in this first batch of ads specify the most requirements and in greatest detail. However, these requirements tend to be quite generic – like capacity to take leadership, leadership skills, responsibility, good communication skills, autonomy, and team spirit – and they are repeated word for word in ads published by the same company for different positions. For instance, all ads published by Manpower or Hays read exactly the same in most items of the candidate profile.

As regards Experience and Education requirements, I noticed that eleven ads require experience working in the area of translation, but it is only quantified in three cases (two years). The same eleven ads request that the candidate be the holder of a Bachelor’s degree (*licenciatura*) in translation, except for the ad for the teacher/translator of Chinese where a degree relevant for the position is requested. No company lists any Testing requirement, and there is also no mention of any kind of mandatory Certification.

The positions announced in these ads are usually for long-term collaboration. Recruitment procedures tend to take 30-45 days until they are completed.

The second batch of ads was collected from ProZ, a specialized website for translators. The most prominent feature of this website is the translation marketplace, where companies or individuals can post projects and translators can bid on those projects. Occasionally, companies publish ads for long-term collaboration.

All six ads in this batch target freelance translators and they are posted by language service providers. Five refer to specific projects, and one seeks translators for regular collaboration. The titles are usually descriptive of the projects at hand, including language pairs and volume. Only one ad refers to Source language competence (“Fluent command of English”) and two specify Target language competence: the translator should be a

“native speaker of Portuguese”. Thematic competence is given in the form of the overall subject of the projects being placed, and Technological competence is also indicated in all ads except for one (three mention CAT tools, the other two Microsoft office).

Translation service provision – Production and Translation service provision – Interpersonal competences are not mentioned at all. Experience is a preferential requirement for one of the projects, and a condition for the only posting on the list aiming for long-term collaboration. Education is not specified in any of the ads, and Testing is only mentioned in one of the posts. No reference to Certification is made.

The projects announced in these ads usually require fast answers and recruitment procedures are usually completed in a matter of hours or days.

During the period for the collection of ads, I only came across one Portuguese case with an open recruiting procedure. It was a call for regular collaboration in a number of different language combinations but mostly including Portuguese as the target language. Only the Thematic and Technological competences are specified in the ad, namely by listing several subject fields alongside the language pairs and requesting CAT tools for projects in computing and software localization.

The final batch of five job advertisements was collected from EU bodies where Portuguese is a working language. I found one open competition to draw up reserve lists from which the European institutions recruit new translators. I also found records of four previous calls for tenders for translation work for European institutions, including the European Central Bank and the Court of Justice of the European Union. The calls for tenders are for freelance translators and lawyer-linguists, and the open competition is for in-house translators. All these institutions have specialized departments to handle these tenders or recruitment procedures.

All five ads are extremely detailed. Four of the five ads have specific Source and Target language requirements, and the ad for the open competition goes as far as listing the minimum CEFR level for each language. None of the ads contains any reference to Intercultural or Information mining competences. The Thematic competence is described in detail in all freelance positions. The Technological competence ranges from no requirement at all to detailed CAT tool requirements.

There is no specific requirement for the Translation service provision – Production competence. Translation service provision – Interpersonal competence is described in great detail for the two ads where the successful candidate is expected to work permanently or occasionally on the premises of the institution. Where the translators are

only expected to work remotely, nothing is specified for this competence. All freelance positions require documented professional experience ranging from a minimum of two to five years. In all cases there is a requirement of a university degree, which must be in Law for applicants for lawyer-linguist positions. For the ECB, a Master's level degree in translation is an advantage. For the competition for Portuguese-language translators (AD5), a three-year degree in any area is accepted. All except one ad specify a testing procedure. For freelance positions, this takes the form of a written test or a sample translation, for the in-house position applicants have to take several rounds of tests for reasoning and comprehension, translating with dictionaries, and a final round of assessment in Brussels. No ad makes any reference to any form of certification.

The final source that I visited for the sample was the site of the Portuguese Agency for Employment and Vocational Training (IEFP). I found one position on offer for a translator. The ad is very detailed with respect to contract details, working hours and salary. However, it is very vague regarding competences required from potential applicants. In fact, the profile only specifies that applicants need to understand Punjabi, Arabic, and Urdu. As a minimum qualification, a Bachelor's degree is required, as well as 36 months of professional experience.

As we have seen, the signals in job advertisements are closely tied to the type of position being advertised. Companies seeking translators for in-house positions provide reasonable details about the competences they expect from candidates (mostly Source and Target language, Technological, and Interpersonal) as well as experience and education. The focus is on finding a person that is not only competent for the position but also compatible with the company for which they will be working.

Companies seeking translators for specific projects through online platforms like ProZ tends to focus on Thematic and Technological competence as signals. The focus is generally on finding a resource that can deliver an accurate translation in time.

Large European institutions have lengthy recruitment procedures, even for freelance collaborations, often involving multiple stages of testing and interviews. They have strict qualification requirements and abundant financial resources. Moreover, they are under scrutiny for transparency and fairness. As Lafeber pointed out with respect to recruitment procedures at inter-governmental organizations, "mistakes in candidate selection are expensive and difficult to correct" (2012, p. 4), especially in permanent positions.

Intercultural competence and Information mining competence do not have any value in the ads that were surveyed. Certification is also never mentioned. Translation service provision – Production is surprisingly of little value, as it is mentioned only in four ads and in very vague terms.

Thematic competence is a valued signal for freelance collaborations but not for in-house positions.

Testing, i.e. verification of signals, is only mentioned once in an ad on ProZ and it is an established practice among European institutions.

4.3.2 Questionnaire

In job advertisements, I was able to pick up some signals that are relevant for the ad publishers, as well as mention of some testing practices. However, in most cases, the ad included little information about the employer, or the recruitment process was being handled by a specialized company. I also noticed that ads tend to include substantial boilerplate text – either to comply with legal requirements or simply because they are a company standard –, which often results in diffuse signaling. This makes it difficult to characterize the sample and to draw any meaningful conclusions. The sampled ads also contained few positions for freelance translators, which is one of my main objects of study and the overwhelming proportion of professionals in this area.

In order to better understand the procedures by which translators are recruited, in particular freelance translators, I designed and delivered a questionnaire for translation companies operating in Portugal.

4.3.2.1 Participants and company demographics

A total of 46 invitations to the survey were sent and received. Of these, 18 participants (39.1%) answered at least one question and 14 participants (30.4%) completed the questionnaire. APET kindly supported the survey, announcing it to its members via internal channels. This had a significant impact in the response rate among APET member companies (35.2%) compared to non-members (26.9%). Out of the four cases of attrition, three occurred by page two of the questionnaire. The other case occurred at an advanced stage of the questionnaire but it was also a case of overlapping answers received from the two people working for the same company.

The questionnaire took participants 6 to 15 minutes to complete, in line with the estimate of ten minutes provided in the invitation email. Shorter completion times were

observed where participants only completed mandatory fields, while participants who added extra information in optional text fields tended to take longer.

The first section of the survey dealt with company characterization. Participants reported having a permanent staff of up to 25 people. Six companies in the survey (42%) reported having ten or more members of staff. The national average of translation companies in this sector with more than ten employees is 2.2%. Larger companies are thus clearly over-represented in the survey. This is an indication that recruiting translators is a business need that affects larger companies more directly, as expected, and also that managers in these companies are keener to engage in research that may help convey their perspective to translator-training institutions.

All participants except one provided the required identification items. The anonymous participant used a polite alias (Prefiro não divulgar/I'd rather not say) and answered all questions until the end. I interpret this as revealing trust and willingness to take part in surveys of the kind.

Regarding human resources, the participants reported on the permanent staff of their companies and translators that regularly provide services for their companies. Table 16 presents the total number of staff and freelance translators across all surveyed companies, as well as the average number of staff and freelance translators. I come to a ratio of approximately 1 in-house to 12 freelance. However, one company reported an exuberant number of freelance collaborators, which skews the results. For this reason, I add the median to explore the central tendency of values, and the resulting ratio is much more realistic: 1 in-house to 6.5 freelance. In any event, either ratio is indicative of an overwhelming proportion of work done by freelancers. I would note that permanent staff include also managerial, administrative staff, and support staff.

Table 16. Total, average, and median staff/freelancers in translation companies

	Total	Average	Median
Staff	111	7.93	5
Freelancers	1 314	93.86	32.5

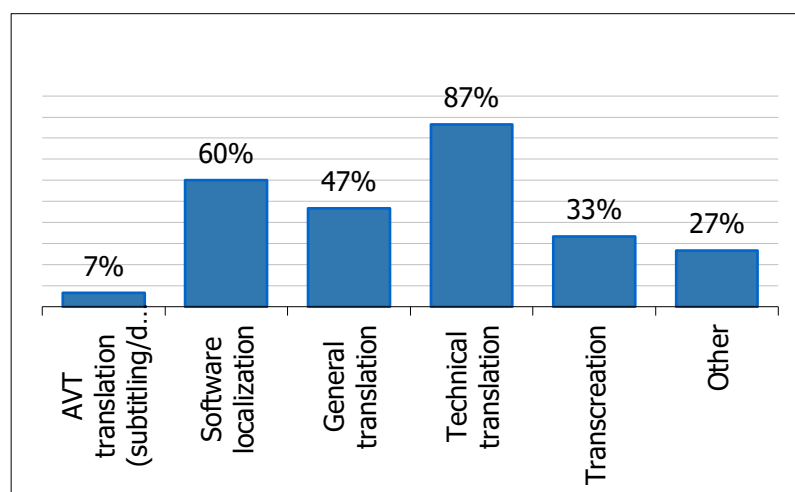
On the last page of this section of the survey questionnaire, the companies were asked about membership of associations, the main specialization areas, and whether the company has a quality system in place.

Regarding membership of associations, 46.67% reported not being members of any association, 40% reported being members of APET, and 33.33% reported being members

of other associations (GALA and ELIA were mentioned most frequently). Answers were non-exclusive.

Specialization areas add an extra layer of information to the profile of companies, and the segment they represent in the industry, but they also provide a glimpse of the specializations in demand for translators. Companies were given the option of choosing up to three areas of specialization. Figure 11 presents the main specializations indicated.

Figure 11. Main specializations of companies



Technical translation is the most common specialization, followed by software localization. Audiovisual translation is the least common specialization among participants. In the Other category, respondents mentioned literary translation, medical/pharma translation, legal translation, scientific translation, and EU bodies.

Finally, regarding the implementation of a quality system, 60% of companies reported having an ISO quality system in place, while 40% reported not having a quality system.

A quality system is an indication of a company's commitment to following specific processes to deliver quality translations. ISO 17100:2015 was the standard most directly applicable to translation services. ISO 18587 applies to post-editing of machine translation output. ISO norms require certification by an external certification agency. Such certification is financially costly and requires significant allocation of resources during some stages of implementation and certification. Having a quality control process in place is a requirement for becoming a member of APET.

4.3.2.2 Recruiting in-house translators

The next section of the questionnaire was aimed at recruitment procedures. Participants were asked initially if they regularly hired in-house translators. Sixty percent answered positively. The remaining participants that did not regularly hire in-house translators skipped the entire segment of the questionnaire devoted to in-house translators and were automatically taken to the first screen of the section for recruitment of freelance translators.

In the results that follow, the maximum number of answers is limited to the nine participants who reported regularly hiring in-house translators.

Participants were first asked about the main methods for finding candidates for a position as in-house translator. Using a list box, they could choose up to two different methods. Table 17 displays the results.

Table 17. Main methods used to find in-house translators

Press ad	Ad on job search website	Ad on website for translators	Company database	Social media	Recommendation	Other
20%	10%	0%	30%	10%	30%	0%
0%	20%	20%	10%	10%	40%	0%

Recommendation by other professionals and company databases were cited most frequently as the primary methods. Press ads came up next. An ad on a job search website or a social media post was seen as being less likely to yield good candidates.

As a secondary method, recommendations still came out top, followed by ads on job search websites or specialized websites for translators. Company databases and social media came up last.

These results suggest that companies prefer to begin their search using familiar, trusted sources, and then span out to less reliable sources.

Participants had the option of adding extra information using a text field. Only two did so. They explained that having freelancers register on the company website was also a method for finding candidates. One participant mentioned reviewing spontaneous applications regularly.

On the next page of the questionnaire, participants were asked to provide input on the signals relevant to the recruitment procedure. This was done by rating different competences using a five-point Likert scale, ranging from “Not relevant” to “Very relevant”. A brief description of the competences was provided and the invitation email contained an attachment explaining them in greater detail. This was deemed necessary

because the competences are based on the EMT model and academic language is not readily understood by industry professionals.

Figure 12 shows the perceived importance of each competence in the recruitment procedure of in-house translators.

Figure 12. Relevance of competences for the recruitment of in-house translators

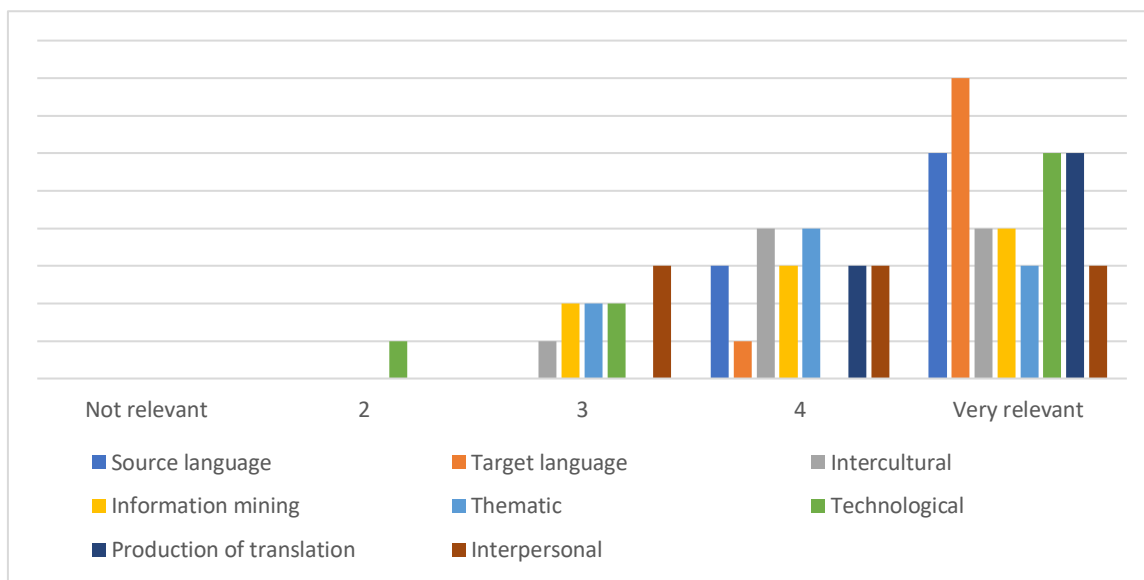


Table 18 shows the mean value for each competence in descending order.

Table 18. Mean value of competences (in-house)

Competence	Mean value
Target language	4.89
Source language	4.67
Production of translation	4.67
Intercultural	4.33
Information mining	4.22
Technological	4.22
Thematic	4.11
Interpersonal	4.00

Target-language competence stands out as the most relevant competence. It is closely followed by Source language competence and Translation service provision – Production competence. Intercultural competence is next in terms of relevance. The more technical competences like Information mining and Technological also show more asymmetric distribution. Technological is the only competence to be rated by one participant in the second lowest level of relevance but it also ranks highly among the

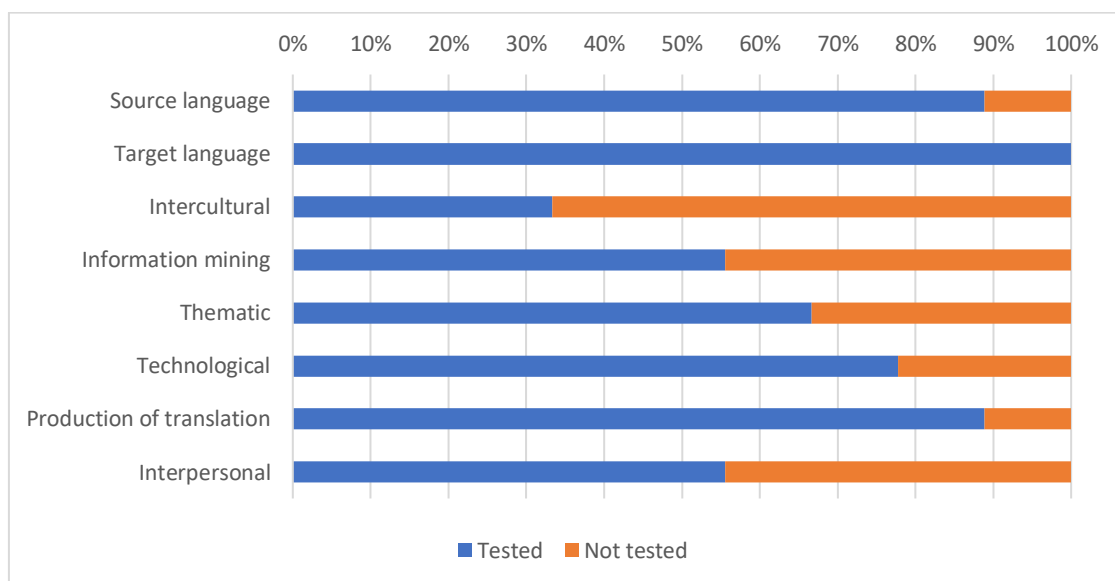
“Very relevant” competences. Thematic and Interpersonal competences are rated as the least relevant, with the latter evenly distributed across the top three levels of relevance.

Tracing a profile based on the competences signaled as very relevant, the ideal candidate would require excellent target language competence; very good source language, technological, and translation production competences; and good information mining, intercultural, thematic, and interpersonal competences.

The final question on this page asked participants whether they use translators who translate into a language that is not their mother-tongue (L2). As this aspect of the TSP – Production competence is developed separately in some university programs, I decided to inquire companies on its actual use. Only one participant, a small organization, in the questionnaire reported using non-native translators.

After establishing the most relevant competences, participants were asked to specify whether they test candidates and in which competences. Figure 13 displays how frequently signals from candidates are tested across companies that regularly hire in-house translators.

Figure 13. Testing of competences in applicants for in-house positions



Applicants for a position as in-house translator are always tested for Target language competence. Source language competence and TSP – Production competence are also tested in nearly 90% of translation companies. Technological and Thematic competences are also frequently tested. Information mining competence and

Interpersonal competence are tested in little over 55% of the sampled companies. Intercultural competence, the most abstract of all, is the least tested.

It is clear that the companies participating in this study rely heavily on tests, particularly for language competences and more practice-oriented competences.

Participants had the option of adding extra information using a text field. Three did so. In two cases, the recruitment process involves an interview and one or several tests. A third participant explained that they regularly recruit in-house translators from a pool of freelance translators who have been working for the company for at least a few months.

The final segment in the section for the recruitment of in-house translators focused on secondary signals. Here companies were asked to rate specific requirements in terms of relevance for the selection of an in-house translator. Figure 14 shows the reported relevance of secondary signals and Table 19 shows the mean value in descending order.

Figure 14. Relevance of secondary signals in the recruitment of in-house translators



Table 19. Mean value of secondary signals (in-house)

Signal	Mean value
Higher education	4.75
Professional experience	4.5
Direct recommendation by other professionals	3.75
Recommendation letter	2.875
Certification by a translator association (ATA, IoL, etc.)	2.5
Member of a translator association	2.125

A university degree ranks very highly on this hierarchy of secondary signals, as does professional experience. Direct recommendation by other professionals is the next most relevant signal, followed by a letter of recommendation. Certification issued by a translator association and membership of a translator association rank lowest on this hierarchy.

4.3.2.3 Recruiting freelance translators

The second part of the section of the questionnaire aimed at recruitment procedures focuses on freelance translators. Participants were essentially asked the same questions as in the first part but now considering the recruitment procedure of freelance translators. It is assumed that all companies in the study recruit freelance translators; therefore no survey logic is used to filter participation in this section.

In the results that follow, the maximum number of answers is fourteen.

Participants were first asked about the main methods for finding candidates for a collaboration as freelance translator. Using a list box, they could choose up to two different methods. Table 20 displays the results.

Table 20. Main methods used to find freelance translators

Press ad	Ad on job search website	Ad on website for translators	Company database	Social media	Recommendation	Other
0%	7%	7%	36%	7%	43%	0%
0%	7%	50%	0%	7%	29%	7%

Recommendation by other professionals and company database were, by far, cited most frequently as the primary methods. An ad on a job search website, an ad on a website for translators, or a social media post were seen as less likely to yield good candidates. No company reported using press ads to recruit freelance translators.

As a secondary method, an ad on a website for translators came out top, followed by recommendations. Ads on job search websites and social media posts were cited by 7% of participants. Other methods were also mentioned. Again, no company reported using press ads to recruit freelance translators.

Participants had the option of adding extra information using a text field. Five did so. They explained that contacts obtained via translator groups on Facebook were also a viable method for recruiting freelance translators. It was also said that on Facebook groups many translators recommend other translators for a specific request, using comment boxes and mention features. Traditional methods like acquaintances, email and

telephone were also alluded to. One participant mentioned that the recruitment process for freelance translators and in-house translators is similar, but freelance translators have to meet stricter requirements in terms of experience. Tests are also reviewed using tighter criteria, as there will be fewer opportunities for following up and in-person training.

While it is clear that companies still privilege reliable sources as their primary method for finding freelance translators, the large weight of ads on websites for translators as a secondary method is also indicative that companies are faced with the need to find someone quickly, potentially for a language pair or specialization that is not covered by their regular pool of freelance collaborators.

On the next page of the questionnaire, participants were asked to provide input on the signals relevant to the recruitment procedure for freelance translators. The exact same method was used as for obtaining information about the recruitment procedure for in-house translators, including the same scale and documentation of competences. This was meant to ensure comparability of the methods.

Figure 15 shows the perceived importance of each competence in the recruitment procedure of freelance translators.

Figure 15. Relevance of competences for the recruitment of freelance translators

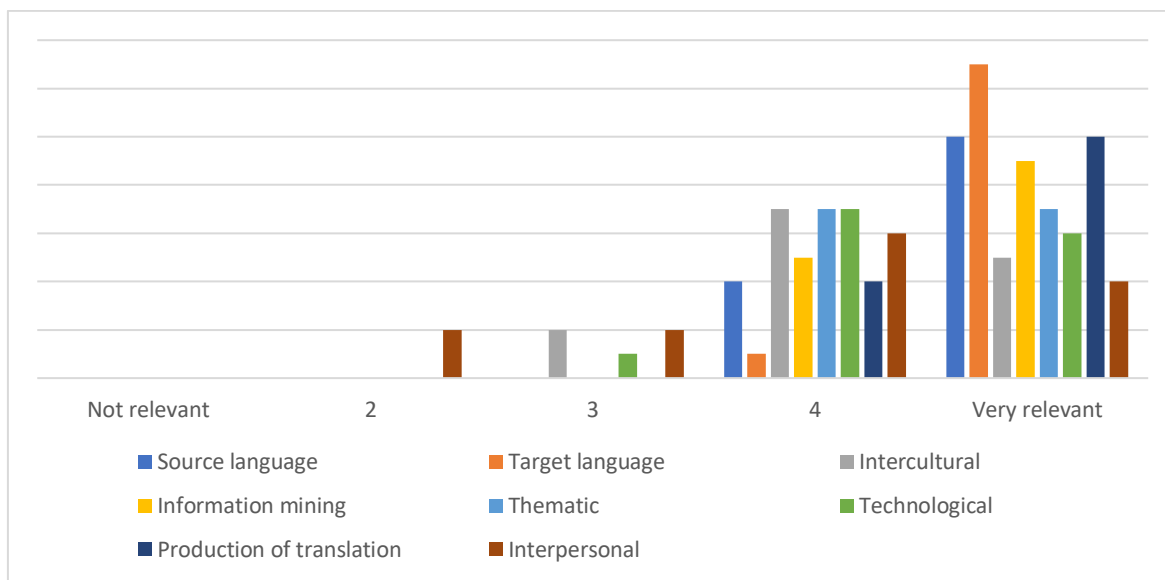


Table 21 shows the mean value for each competence in descending order.

Table 21. Mean value of competences (freelancer)

Competence	Mean value
Target language	4.93
Source language	4.71
Production of translation	4.71
Information mining	4.64
Thematic	4.50
Technological	4.36
Intercultural	4.21
Interpersonal	3.86

Target language competence stands out again as the most relevant competence. It is closely followed by Source language competence and Translation service provision – Production competence. Information mining, Thematic and Technological competences are next in terms of relevance. Freelance translators work autonomously, and these three competences are closely linked with the ability to do so. Since freelancers do not have the same resources or immediate access to more experience colleagues as in-house translators do, companies consider it important that translators have these competences from the start. The concentration of competences in higher categories of relevance also indicates that it is important to choose the right candidate from the start, as there will be less margin of error and fewer opportunities for training. Intercultural and Interpersonal competences are more evenly distributed across categories of relevance, and more spread out. Interpersonal is the only competence to be rated by one participant in the second lowest. As freelance translators usually do not interact with company clients and are seldom part of a team, this competence is not prioritized by companies.

Tracing a profile based on the competences signaled as very relevant, the ideal candidate would require excellent target language competence; very good source language, and translation production competences; good technological, information mining, and thematic competences. Intercultural and interpersonal competences are less relevant in freelance translators.

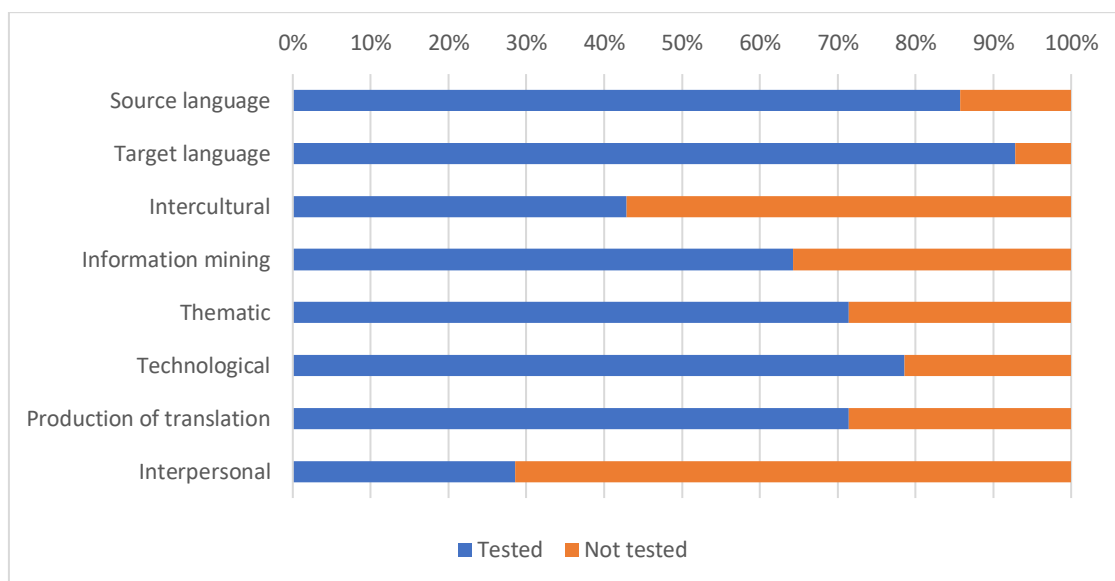
Globally, there is a greater concentration of competences in the two highest categories of relevance when compared to the recruitment procedure for in-house translators. There is no difference at the top of the hierarchy of competences between in-house and freelance translators: Target language, Source language and TSP – Production are the main competences, in this order. Intercultural competence is clearly considered more relevant for in-house translators than for freelance translators, whereas Thematic competence is seen as more relevant in the recruitment of freelance translators than in-house translators. Interpersonal competence ranks last in in both cases, but the mean value

is significantly higher for in-house translators, indicating that this particular competence is more relevant for this group of professionals.

The final question on this page asked participants whether they use translators who translate into a language that is not their mother-tongue (L2). Here I observed an increase in the number of participants who reported using non-native translators – three (21.4%) – relative to the answers obtained from participants who regularly recruit in-house translators. All the companies that answered positively to this question have an in-house staff of under three people, and they all reported not recruiting in-house translators regularly.

After establishing the most relevant competences for freelance translators, participants were asked to specify whether they test candidates and in which competences. Figure 16 displays how frequently signals from candidates are tested across all surveyed companies.

Figure 16. Testing of competences in freelance translators



Companies nearly always test freelance translators for their Target language competence and Source language competence. Technological competence is the third most tested competence, closely followed by TSP – Production, Thematic, and Information mining competences. The least tested competences are Intercultural and Interpersonal, both below the 50% mark.

It is clear that the companies participating in this study rely heavily on tests, particularly for language competences and competences associated with working independently.

Participants had the option of adding extra information using a text field. Two did so. In one case, the participant detailed that the test is in writing. Another participant explained that in contrast with the procedure for in-house translators, freelancers are not called in for an interview. They undergo a round of translation tests where candidates are expected to show their abilities in different areas, and translators will only be contacted for projects in areas where they have been approved during the testing procedure.

The final segment in the section for the recruitment of freelance translators focused on secondary signals. Here companies were asked to rate specific requirements in terms of relevance for the selection of a freelance translator. Figure 17 shows the reported relevance of secondary signals and Table 22 shows the mean value in descending order.

Figure 17. Relevance of secondary signals in the recruitment of freelance translators

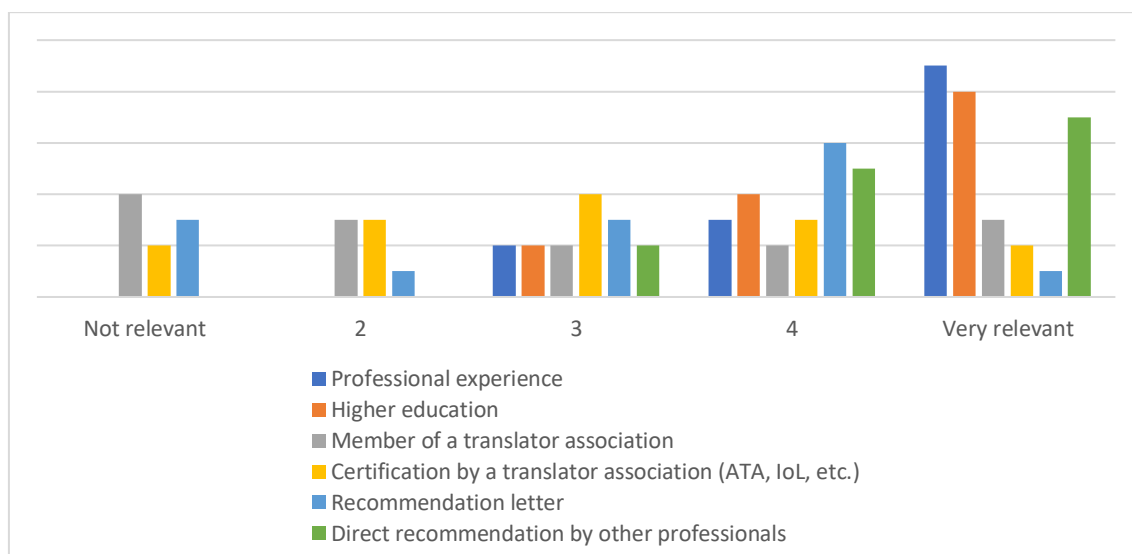


Table 22. Mean value of secondary signals (freelancer)

Signal	Mean value
Professional experience	4.5
Higher education	4.42
Direct recommendation by other professionals	4.35
Recommendation letter	3.07
Certification by a translator association (ATA, IoL, etc.)	3
Member of a translator association	2.78

Professional experience ranks very highly on this hierarchy of secondary signals, as does a university degree. Contrary to what could be seen previously for in-house

translators, all signals are represented in the “Very relevant” category, albeit with varying weight. Direct recommendation by other professionals is the next most relevant signal, followed by a letter of recommendation. Certification issued by a translator association and membership of a translator association rank lowest on this hierarchy. Interestingly, both signals span evenly across all categories of relevance, meaning that they are neither seen as indispensable nor useless.

So far, I have seen which signals employers consider the most relevant, both those closely tied to competences as well as other signals that employers may need to interpret when faced with a decision to hire translators under uncertainty.

I also obtained information about the testing practices regarding the signals closely tied to competences. All these signals and testing occur before any collaboration begins. The high incidence of testing in certain areas suggests that signals related to language competence (Target language, Source language), TSP production and more practice-oriented competences (Technological, Thematic and Information mining) are not trusted, and that applicants typically show gaps in their competences or other skills. Do companies try to make up for those missing skills by providing training?

4.3.2.4 Training for in-house translators

The next section in the survey questionnaire dealt with training. On-the-job training is a requirement under Portuguese law: companies must provide 40 hours of training to staff every year. Smaller companies (fewer than 10 employees) benefit from special exemptions.⁸

Participants were asked if they provided their in-house translators with training in different areas. Once again, I used the categories from the modified benchmark based on the EMT framework. Subsequently, participants were asked in detail about training in Technological competence in order to uncover information about missing skills and also about demand for specific skills.

The first question in this section of the questionnaire asked participants if they provided training to in-house translators. Seventy one percent answered positively. The remaining participants that did not provide training to in-house translators were automatically taken to the first screen of the section for training of freelance translators.

⁸ Portuguese Law 93/2019, of September 4.

In the results that follow, the maximum number of answers is limited to the ten participants who reported providing training to in-house translators. Figure 18 shows the volume of training provided to in-house translators across different competences and Table 23 shows the mean value in descending order.

Figure 18. Volume of training provided per competence (in-house)

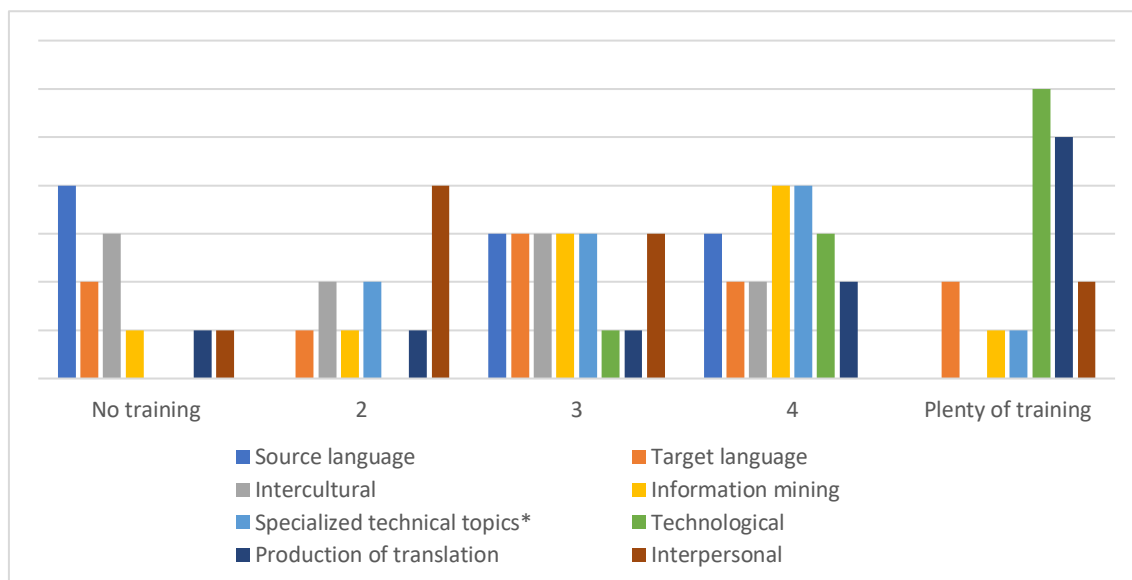


Table 23. Mean value of training provided (in-house)

Competence	Mean value
Technological	4.5
Production of translation	3.8
Target language	3.7
Information mining	3.5
Specialized technical topics*	3.4
Interpersonal	2.8
Intercultural	2.7
Source language	2.5

Technological and TSP – Production stand out as the areas where the highest volume of training is provided. Target language competence is present in all categories, but more strongly towards the upper half of the scale. Information mining is the competence with the fourth largest volume of training. Thematic competence, here phrased as Specialized technical topics⁹, is also most evenly distributed around mid-scale. The volume of training in Interpersonal competence, on average, is also close to mid-

⁹ The term “Specialized technical topics” is here used instead of “Thematic” due to the need to restrict the term to current practices in training. It is highly uncommon for companies to provide baseline training in any area. Instead, usually companies provide training in specialized topics/areas as needed.

scale but spanning all except one upper-intermediate category of volume. Intercultural is one of the competences where companies least invest in training for in-house translators. Source language competence comes up frequently mid-scale, but it is worth mentioning that it is the competence where the highest number of participants reported not providing any training at all, and on average it is the competence with the lowest volume of training.

Looking at training in Technological competence in greater detail, the areas where most training is provided to in-house translators are commercial CAT tools, machine translation and post-editing, general computing and localization. At the other end of the spectrum, the least training is found in proprietary CAT tools, programming, and desktop publishing.

Figure 19 displays the results for training in Technological competence and Table 24 shows the mean value in descending order.

Figure 19. Training in Technological competence in detail (in-house)

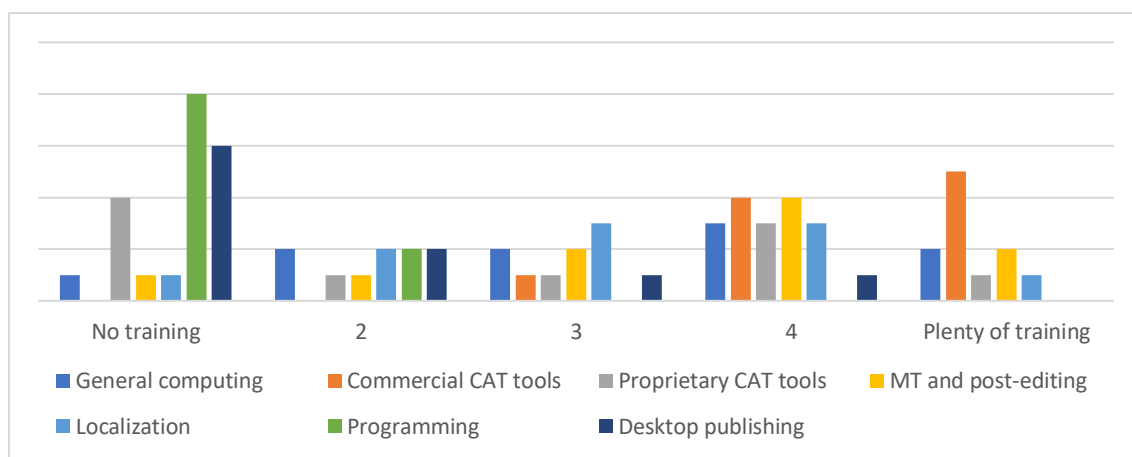


Table 24. Mean value of training in Technological competence (in-house)

Technological competence	Mean value
Commercial CAT tools	4.4
MT and post-editing	3.5
General computing	3.3
Localization	3.1
Proprietary CAT tools	2.6
Desktop publishing	1.7
Programming	1.2

Participants had the option of adding extra information using a text field. One did so to explain that the internal training process is based on the know-how of the teams, and that the technological platform used enables a real-time comparison of different translations, which provides instant feedback. Since this company develops its own tools,

training is provided during onboarding of new collaborators or when new versions are released.

4.3.2.5 Training for freelance translators

The first question in the training section of the questionnaire asked participants if they provided training to freelance translators. Only five companies (35.7%) reported doing so.

Figure 20 shows the volume of training provided to freelance translators across different competences and Table 25 shows the mean value in descending order.

Figure 20. Volume of training provided per competence (freelancers)

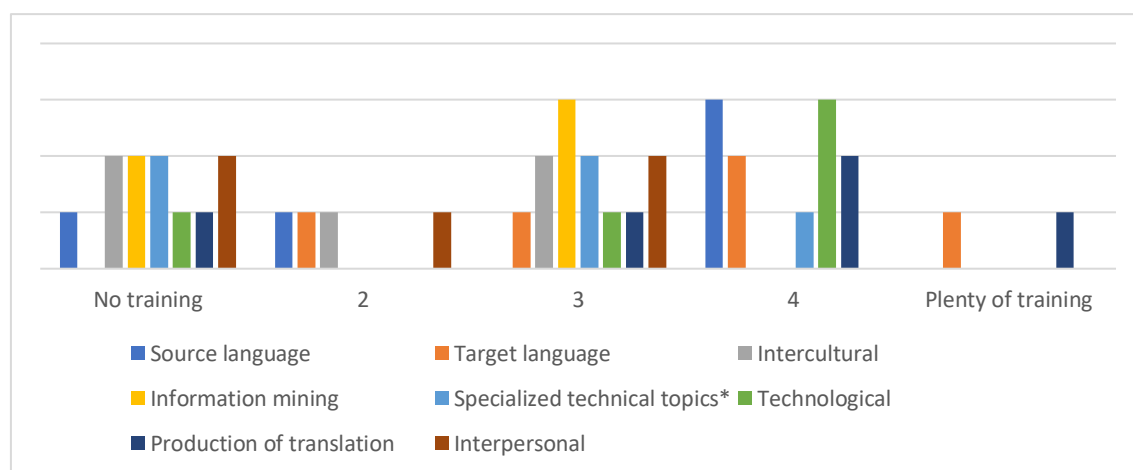


Table 25. Mean value of training provided (freelancer)

Competence	Mean value
Target language	3.6
Technological	3.4
Production of translation	3.4
Source language	3
Specialized technical topics*	2.8
Information mining	2.6
Interpersonal	2
Intercultural	1.6

Target language stands out as the area where the highest volume of training is provided. Technological, TSP – Production, and Source language competence are next in terms of volume. Most competences are represented at mid-scale. The lower positions in this ranking are occupied by Thematic competence, Information mining, Interpersonal and Intercultural competence. The distribution pattern and the number of respondents in this section of the questionnaire highlights much lower volume of training provided to freelance translators when compared to in-house translators.

Looking at training in Technological competence in greater detail, the areas where most training is provided to freelance translators are commercial CAT tools and machine translation and post-editing. General computing and localization are the next most relevant categories. At the other end of the spectrum, the least training is found in proprietary CAT tools, programming and desktop publishing.

Figure 21 displays the results for training in Technological competence and Table 26 shows the mean value in descending order.

Figure 21. Training in Technological competence in detail (freelancers)

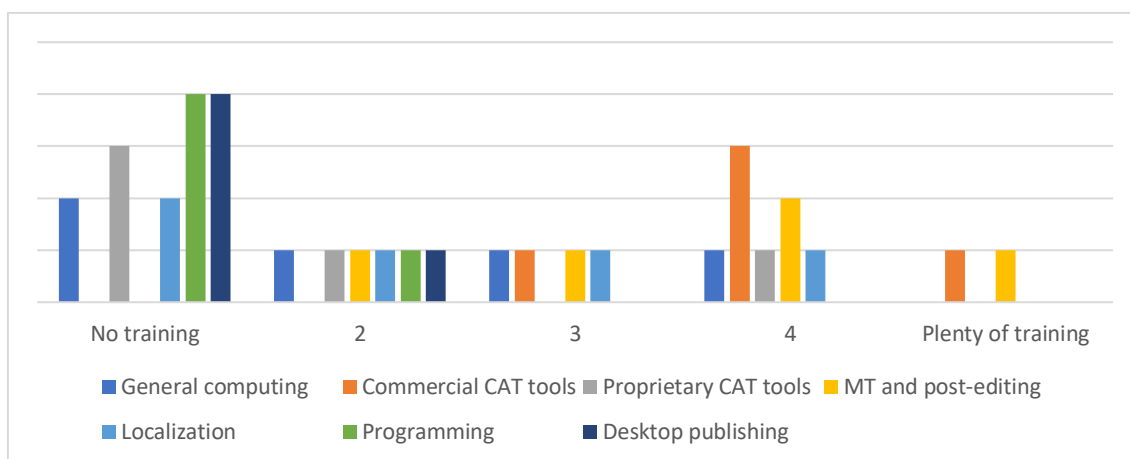


Table 26. Mean value of training in Technological competence (freelancer)

Technological competence	Mean value
Commercial CAT tools	4
MT and post-editing	3.6
General computing	2.2
Localization	2.2
Proprietary CAT tools	1.8
Programming	1.2
Desktop publishing	1.2

Participants had the option of adding extra information using a text field, but this facility was not used in this part of the questionnaire.

4.3.2.6 Feedback and suggestions

On the final page, participants had the opportunity to provide feedback on the questionnaire and they could also enter suggestions for improvements or further research.

The feedback received was very positive. One participant gave thanks for the interest in this particular topic, which they consider very relevant for the sector. Another suggested including a question about the main training gaps in recently hired translators. Although they were aware that this is not the direct topic of the study, they mentioned

that those gaps shape their approach to new hiring and selection criteria at any given time. A third participant mentioned that the section for freelance translator training should be different from the similar section for in-house translators, because the situations are different. Unfortunately, they did not specify further. Finally, one participant praised the questionnaire for being well-organized and collecting important information.

I received two suggestions for improvements. One dealt with the term I used for permanent employment contract. Instead of “contrato a termo incerto”, the participant suggested using “contrato sem termo”. Although the difference is small and quite technical, a permanent employment contract is indeed most accurately rendered in Portuguese with the expression “contrato sem termo”. The second suggestion combined a compliment on the relevance of the study and a note that it can become even more relevant if shared with translator-training program directors and students.

4.4 Interviews

A total of ten interviews were carried out with representatives of nine different organizations. Eight were recruited from the survey questionnaire sent during an earlier stage in this research project, while two were invited specifically for the interview stage.

4.4.1 Stakeholders

The sample of participants is depicted in Table 3. There is an even distribution of gender, although I would note that at top level management women have the lead by 5:4, a ratio that is wider if only the organizations based in Portugal are considered, i.e., 5:3.

All participants hold a university degree and most hold a degree in Translation or Languages, but even the participants with academic training in other areas have an active role in the daily operations of the companies, e.g. in project management or IT.

The youngest participant in the study is in the 30-40 years old age range, while the oldest is a little over 80 years old and still actively involved in the company affairs. Most participants are in the 40-50 or 50-60 age groups (4 and 3 participants, respectively). One of the participants is already retired and no longer takes part in the management of the company.

A separate function for human resources or vendor management is only reported by one middle-sized company and by larger organizations. In smaller organizations, this

function is carried out on an ad-hoc basis by project managers or by higher-level managers.

4.4.2 Organizations

The distribution of the sample reflects the Portuguese translation market structure to a large extent, with two companies employing 20-49 people, two companies employing 10-19 people (both at the lower end of this range) and four companies with a permanent staff of 2-9 people. The global player invited for this section of the study has a permanent staff over 8000 people.

This pyramid distribution echoes the findings in Table 11. As mentioned in the previous section, smaller companies tend to have less specialized roles and, e.g., project managers may also review or translate occasionally. In larger companies, the roles are more clearly defined, and companies tend to keep managerial functions in-house. Language-related work is outsourced to freelance translators and reviewers, or increasingly executed by machine translation engines and then reviewed by post-editors. All companies reported using freelancers extensively. This is corroborated by the remarkable disproportion between the number of companies and individual enterprises, i.e., freelancers, seen in Figure 9.

Three of the companies in the sample are located in Lisbon. Two companies are based in Oporto, one of which also has offices in Lisbon and subsidiaries in other Portuguese-speaking countries. Three of the smaller organizations are located in medium-sized cities in the North and Center of Portugal. One of these companies also has offices in Oporto. The global company is headquartered in New York City, in the United States.

The youngest company in this study is ten years old, while the oldest has been in business since 1985. This is unsurprising given that most of the companies interviewed are members of APET and one of the admission requirements is to have been in business for over three years.

On the same note, since the participants were primarily recruited from respondents to the survey questionnaire, it is unsurprising that a significant number of the Portuguese companies (five) in the sample are members of APET. This includes all companies with a permanent staff over ten people. One of the remaining three small companies is a member of the European Language Industry Association (ELIA) The other two organizations are not members of any association, but I should note that one of them was

launched with the support of a business incubator and the other was established as part of a larger institution.

Early in the analysis, it became apparent that the companies in the two smaller size ranges share many features. For this reason, here I will group together the companies with 2-9 and 10-19 employees as “small LSPs”, and present the results in one dedicated section. A subsequent section will contain the results for the larger Portuguese companies, and finally a section will be dedicated to the global player represented here.

4.4.3 Small LSPs

Within the smaller language-service providers, we find both the youngest and the second oldest companies that participated in this section of the study. Some smaller participants spontaneously made references to their specializations and the directionality of their work. Only one of the organizations, which also has the task of aiding in the internationalization of its parent institution, reported working mostly into English. All others mentioned varying degrees of work from and into the Portuguese language. Only one company stated a specific specialization, in the field of legal and financial translations, and its catering for this niche segment was also pointed out as the specific reason for the small size of the company.

One company reported a stable earnings trend, while all others reported being on a path of growth over the long term. In the previous five years, the global SARS-CoV-2 pandemic was highlighted as a step backwards in the long-term growth trend, but most companies reported having returned to pre-pandemic levels or higher. The most affected area of business was the provision of interpreting services in the initial stage of the pandemic, when the sector came to a halt due to the cancellation of all public events. The sector was nevertheless quick to adapt to remote interpreting technologies and setups. The provision of translation services remained, by and large, unscathed.

During the interviews, some workforce issues were cited as constraints on growth. For SCMNO50, the company’s institutional structure as part of a university prevented it from being as flexible and competitive as companies that were operating independently in the market. The relatively low rates paid to translators, in particular, caused significant attrition among freelance collaborators. SCFPO50 reported that a lack of talent prevented the company from growing. In-house staff typically were leaving the company after five or six years and beginning work as freelancers:

[O]s tradutores internos geralmente iniciam com um estágio. Fazem um estágio da universidade. Um estágio letivo, depois passam para um estágio profissional e depois integram os quadros. E o que acontece geralmente é que fica uns cinco, seis anos e depois por opção estabelecem-se por conta própria, como tradutores. Na grande, maioria é o que tem acontecido. Todos os nossos ex-colaboradores atualmente são tradutores independentes, com os quais até colaboramos.

[5m 58s]

[In-house translators generally begin with an internship. They do an internship for the university. A curricular internship, then they move to a professional internship and then they become permanent staff. What usually happens is that they stay for about five, six years and then, by choice, they become freelance translators. For the most of them, that's what happens. All our former collaborators are currently independent translators with whom we work.] (My translation here and below)

For the two companies based outside Lisbon or Oporto, location weighs differently on their capacity to attract talent to work in-house and on-site. In one case, the company is based in a city that hosts a young university with translator-training programs and lies within 50 kilometers of a large urban area where other translator-training institutions exist. They reported no difficulties in attracting talent. The other company, situated in the center region of Portugal and some 75 kilometers away from the closest university with a translation program, reported location as an obstacle in the recruitment of translators to work in-house and on-site.

However, the most frequently cited issue regarding the workforce is of a generational nature. Older translators are reported to be skilled writers but averse to the use of computer-assisted translation tools or are poorly prepared for that purpose. Younger translators, on the other hand, are fluent users of technology but are reported as lacking writing and translation skills. SCFPO50 said:

Os tradutores, digamos, do antigamente, já como idade mais avançada, escrevem bem e têm uma boa cultura geral, mas não sabem usar as ferramentas, o que depois nos dificulta em grandes trabalhos, desesperamos que não sabem fazer a verificação da qualidade, da consistência, por isso não têm capacidade para

trabalhar com as ferramentas e os tradutores mais novos trabalham muito bem com as ferramentas, mas ainda não têm a experiência necessária para fazer traduções de qualidade ou não estão especializados numa área. Por isso temos aqui alguma dificuldade.

[4m 39s]

[Translators of the old guard, let's put it like that, of a more advanced age, they write well and they have good general knowledge but they do not know how to use the tools, and this makes our life harder in large projects. We despair because they do not know how to perform quality assurance, consistency checks. And for that reason they are unable to work with the tools. The younger translators work very well with the tools, but they still have not acquired the necessary experience to produce quality translations or they are not yet specialized in a specific area. For that reason, we have some difficulties.]

According to MCMLX80:

Ainda vejo, aparecem muitos tradutores, sobretudo os mais os mais velhos, para eles uma ferramenta CAT, uma ferramenta de memória, tradução é uma coisa que eles abominam, não é?

[27m 29s]

[I still see many translators, specially the oldest, for them a CAT tool, a translation memory tool, it's something that they can't stand, right?]

4.4.3.1 Recruitment process in small LSPs

Among the small language-service providers, only one reported having a specific person for human-resource and vendor management. That person is responsible for recruitment as well as continuous assessment and career development of the staff. Recruitment in the remaining companies is usually carried out by top management or project managers.

Over the last few years, most recruiting of in-house translators occurred on the back of internships. These programs are limited in duration, usually lasting six months, and may benefit from subsidies granted by the Portuguese government's Agency for

Employment and Vocational Training (IEFP). MCMLX80 reported having stopped these internship programs once the company decided to adopt a fully remote work model, shortly before the pandemic started:

Ah, 2 anos antes da pandemia. Portanto, a pandemia foi em 2020, 2021, não é, eu em 2000 e fim de 2018, princípio de 2019. Não sei porquê... Aliás, sei, foi mais uma ação de baixar custos. Espetei com a malta toda em casa. Tudo, então é tudo em teletrabalho que, aliás, é uma coisa que se utiliza bastante no mercado de tradução.

[7m 36s]

[Oh, two years before the pandemic started. So, the pandemic was in 2020, 2021, wasn't it, and in 2000, end of 2018, beginning of 2019, I'm not sure why... Actually, I am, it was to lower costs. I had everybody working at home. Everything, everything then becomes remote working, which is actually something quite common in the translation market.]

[E]u quando tinha a empresa, quando tinha escritório e eu começava a contratar na universidade, aproveitava a questão dos estágios. E os estágios próprios que as universidades também pedem aos alunos para eles fazerem. Mas eu tinha um local onde ter as pessoas e onde as seguir e onde enfim poder fazer isso de uma maneira normal, não é? Desde que pus as pessoas todas em casa, essa atividade parou praticamente, quer dizer... Um tipo, fazer um estágio em casa, um miúdo, quem saía da universidade, fazer um estágio em casa, pode ter alguém a segui-lo, mas não é bem a mesma coisa, não está no ambiente de trabalho, não pode tirar dúvidas quando quer e quando lhe apetece.

[15m 16s]

[When I had the company, when I had offices and I began recruiting at universities, I would use internships. And there were also the internships that universities request students to do. But back then I had a place to accommodate people, where I could follow them and where I could do it in a normal way, right? Since I put everybody working at home, that activity almost stopped entirely, I mean... Some guy doing his internship at home, a kid, someone leaving university, doing an

internship at home, there may be somebody following him, but it's not quite the same thing: he is not in a work environment; he cannot simply ask questions whenever he wants.]

All other companies mentioned having some activity at this level. There was no mention of hiring experienced translation staff on a permanent basis.

The process of recruiting freelance translators is quite diverse. The two largest companies in this size class are ISO certified and are therefore bound to the requirements set out in standard ISO 17100:2015. The smaller companies have more informal procedures based mainly on personal contacts or analysis of curricula received by the company.

Participant MCMCE30 detailed that the process starts with a search in the internal platform that translators use to submit spontaneous applications or by an active search in online translator platforms like ProZ or Translator Hub. The next step is the verification of ISO compliance, checking the translator's qualifications and experience. According to ISO 17100:2015, translators must hold a graduate qualification in translation from an institution of higher education, hold graduate qualification in some other field plus two years of professional experience, or have five years of full-time professional experience in translating. Afterwards, the curriculum vitae is analyzed and the applicant is asked to take a test. To ensure consistency and fairness, the tests are always reviewed by the same teams. The translators are given the opportunity to review the test results and submit their comments and objections. At the end of the process, the translator is awarded a classification. A minimum value must be met for the translator to be included in the company's database of available translators.

Another company, also ISO 17100:2015 certified as well as being a reseller of translation tools, had built up an extensive database of translators, which they tap whenever new translators are needed.

Smaller companies mostly rely on personal contacts or first-hand knowledge of the candidates. SCFNO40 reported the following experience:

É assim, a maior parte da equipa que nós temos a colaborar connosco como freelance já trabalha connosco há alguns anos. A maior parte foi-nos chegando através de recrutamento ou por contactos de outras pessoas, ou porque fomos

conhecendo essas pessoas através dos serviços que iam prestando a outras entidades parceiras nossas e fomos obtendo assim os contactos.

[6m 53s]

[So, the situation is the following. Most of the team that we have collaborating with us as freelancers has been working with us for a few years. Most of them came to us via recruitment processes or through contacts with other people, or because we came to know these people through the services that they provided for other partner entities, and that is how we got the contacts.]

MCMLX40, who also works as a translator trainer at university level, reported having directly invited former students to work as project managers at the company:

Temos três gestores de projetos, estamos a precisar de outro gestor de projetos, os últimos gestores de projetos que foram contratados foi através de... Na verdade, eu conhecia-os por ser, por ter sido professor deles e por isso... Fiz a proposta imediata, sem concurso e sem um anúncio. O próximo vai ser com anúncio, portanto, vamos ter um anúncio em que vamos procurar quem está mais adequado para essa, para essa função.

[15m 30s]

[We have three project managers and now we need another one. The last few project managers that we hired were contacted through... actually, I knew them personally because I had been their teacher, so... I made a direct offer: no recruitment process and no ad published. The next one will be with a job ad, which means that we will have an ad looking for the most adequate person for that role.]

4.4.3.1.1 The relevance of factors in recruitment

During the interviews, participants were asked to rate the importance of four specific items in the recruitment process, using a scale ranging from Not relevant to Very relevant. A similar scale had been used before in the survey questionnaire earlier in this research.

Language competence was the first item that participants were asked to rate. In line with the results obtained in the survey questionnaire, language skills are considered Very relevant by all but two participants. However, SCMNO50 did not reply using the suggested scale. An average value can nevertheless be inferred from his words:

Pronto, portanto, a certa altura, eu, quando fazia o processo de seleção, não olhava necessariamente para as competências linguísticas. Olhava. Mas não era necessariamente sinónimo de rigor.

[21m 27s]

[So, therefore, from a certain point, when I was doing the recruitment process, I wouldn't necessarily look at language competence. I mean, I would. But it wasn't necessarily synonymous with accuracy.]

It should be mentioned that this remark follows a description of the difficulties that this language-service provider faced in dealing with people who wanted to work there, or who were recommended internally within the wider institution but who lacked any translation skills. Therefore, language competence in isolation is considered by this participant to be less relevant than qualifications or experience in translation for the recruitment process.

MCMLX80, from a technologically-oriented language-service provider, also ranks language competence at mid-scale:

JB: [...] competências linguísticas.

MCMLX80: É pá, vou pôr 3.

JB: Assim, mais ou menos relevante.

MCMLX80: Sim, mais ou menos. Isso é uma coisa que eu vou testar depois.

[20m 25s]

[JB: [...] language competence.

MCMLX80: Oh man, I'll give it a three.

JB: So, more or less relevant.

MCMLX80: Yes, more or less. That is something that I will test later on.]

Within the small language-service providers, professional experience is almost unanimously ranked as Relevant. This is significantly below the value obtained from the survey questionnaire, where the mean value of professional experienced reached 4.5 (on a scale of 1 to 5).

The exception is participant MCMLX80, for whom experience is a Very relevant factor in the recruitment process. Moreover, at this company, all applicants are required to provide references, and the referees are then contacted individually for verification:

O nosso processo de tradução está um bocadinho baseado nas regras da norma. Nós não fugimos às regras da norma, não é? Normalmente e para as pessoas que têm muita... Como são pessoas já com experiência, nós não as vamos pôr a fazer testes. Não, nem nada, nem nada, nem nada que se pareça, temos é mais atenção às referências que eles dão.

[16m 51s]

[Our translation process is a little bit based on the rules of the standard. We abide by the rules of the standard, right? Usually and for people who have a lot of... since these are people with experience, we are not going to have them write tests. No, nothing of the kind, we just pay more attention to the references that they provide.]

JB: [...] em relação à experiência que os tradutores indicam ter.

MCMLX80: Aí faço 5, é isso que lhe estava a dizer.

[21m 00s]

[JB: [...] regarding the experience that translators report having.

MCMLX80: In that case, I'll say 5. That's what I was telling you before.]

In this group of small language-service providers, only two are ISO 17100:2015 certified. Under this standard, experience in translation can partly or fully replace formal graduate qualification in translation as a requirement for the provision of a service compliant with said standard.

Thirdly, participants were asked to rank the importance of tests in their recruitment processes. Here there is significant variation: the answers range from Not relevant to Very relevant. On this point, the survey questionnaire indicated very extensive use of testing

in source and target language competence, production of translation competence and technological competence (all above 75%). It thus comes as a surprise that three of the six companies in this category consider tests to be of little importance or not relevant at all. According to MCMLX40, tests do not add extra information, which is why they stopped using them some years ago:

A escolha dos tradutores freelancer, quando é necessária, faz-se ou através de um pequeno teste que já fizemos isso até há uns anos. Mas na verdade desistimos, não, não nos parecia haver, digamos, grande vantagem, fazer um teste na nossa, nos nossos procedimentos.

[16m 8s]

[The selection of freelance translators, when necessary, is made either through a small test, which we used to do until a few years ago. But actually we gave up on it: there didn't seem to be any great advantage, let's say, to having a test among our procedures.]

Nós temos, ou seja, nós temos os testes preparados e usamos, mas neste momento é Nada relevante porque não, não, não estamos a conseguir um teste que nos dê mais informação do que o próprio currículo, a experiência.

[18m 54s]

[We have the tests ready and we use them, but at this moment it is Not relevant because we are not able to devise a test that provides more information than the curriculum, the experience.]

Distrust of testing is also related to the personal experience of the interviewees. SCFNO40 reported bad experiences as the reason for the low importance attributed to testing in her company's recruitment processes:

Eu acho que os testes, muitas vezes, já passei por essa experiência enquanto freelance, em que fiz muitos testes que eu penso que eram aproveitados como trabalho. E depois, nunca serviram para nada. Nunca era, nunca fui recrutada através de teste algum. Por isso acho que os testes são uma coisa que nem sempre

é assim tão válida. Já me aconteceu por experiência e acho que não é necessariamente aquilo que vai ditar se a pessoa é boa ou má profissional, um teste.

[12m 53s]

[I think that tests, often, I've been through that experience as a freelancer, when I did a lot of tests that I think were actually used as work. And then I never got anything from that. I have never been recruited based on any test. That's why I think that tests are something that is not always that valid. It has happened to me in my experience, and I think that it's not necessarily that element that will tell me whether the person is a good or a bad professional, a test.]

As seen above, participant MCMLX80 reported not using tests for experienced translators. He prefers requesting references and making the necessary contacts to check the references.

Participant SCMNO50, on the other hand, ranks tests as Very relevant in the recruitment process, since they are a way of filtering high numbers of applicants and building a professional reputation:

Era porque, com a quantidade de currículos, digamos CVs, que nós que nós recebíamos, tínhamos que fazer, fazer isso e também tínhamos que ter essa essa atitude mais ou menos profissional de pelo menos dar uma satisfação a alguém e tornar o processo é um pouco transparente e credível também e mostrar às pessoas.

[24m 56s]

[It was because with the amount of CVs that we received, we had to do it, and we also needed to have that more or less professional attitude of at least giving some satisfaction and making the process somewhat transparent and credible, and also show it to people.]

MCMCE30 also ranks tests as Very relevant because they enable standardization, consistency and fairness.

Finally, in this section of the interview, participants were asked about the relevance of academic qualifications in their recruitment processes. Within this group of smaller language service providers, two are ISO 17100:2015 certified and the requirements for

academic qualifications are set out in the standard. For this reason, these two companies do not explicitly rank the relevance of qualifications: they simply state that it is something that they have to pay attention to in light of the standard.

The remaining language-service providers rank academic qualifications as either Relevant or Very relevant. This is in line with the results obtained in the survey questionnaire, where higher education ranks among the most valued signals. However, participant SCFNO40 reported that she also likes to work with translators who have graduate qualifications in areas other than translation, such as law:

Nós temos pessoas que colaboram connosco, que são, por exemplo, licenciadas ou têm mestrados em outras áreas. Já me aconteceu. Mas que trabalham exclusivamente em tradução, por exemplo, e eu acho que esse *know how* também ajuda, por exemplo, quando trabalham e eu posso dar um exemplo, aqui nós temos uma tradutora freelance que a formação inicial dela é direito. E nota-se perfeitamente nas traduções jurídicas. A diferença da forma como é produzida a tradução de alguém que não tem tanto essa experiência, porque ter um conhecimento interno de como funciona direito é diferente do que alguém que nunca trabalhou com nada legal ou jurídico.

[14m 5s]

[We have people collaborating with us who are, for example, holders of a BA or a Master's degree in other areas. It has happened to me before. But these people work exclusively in translation, for example, and I think that their know-how also helps when they work. I can give you an example: we have a freelance translator with a degree in law. And you can tell this perfectly in legal translations. The difference in the way the translation is produced compared with somebody who does not have that experience, because having inside knowledge of how law works is different from somebody who has never worked with anything legal.]

Participant SCFPO50, due to the specialization of her company, reported working mostly with translators with graduate qualifications in areas other than translation:

[E]u gosto de trabalhar com tradutores especializados. Gosto de trabalhar com tradutores da área de direito, por exemplo, da área de economia.

[14m 5s]

[I like working with specialized translators. I like working with translators in the area of law, for example, in the area of economics.]

During the inductive stage of coding, it became apparent that the continuous assessment of translators was an important tool for at least four of the smaller language-service providers. Two of them use tests to assess prospective translators, while the other two do not.

However, testing does not seem to impact how continuous assessment is used as a tool to build trust. For example, SCFPO50 uses testing and afterwards assigns projects gradually until it is established that the translator can be relied upon.

At an early stage of the collaboration with the company, continuous assessment is also seen to be serving as a proxy for testing different skills. MCMLX80 explains how he acquires information about the language competence of translators:

MCMLX80: Sim, mais ou menos. Isso é uma coisa que eu vou testar depois. Está a ver?

JB: Ah, porque depois nos primeiros projetos, faz um acompanhamento mais cuidado.

MCMLX80: Faço um acompanhamento mais, mais profundo daquilo que ele faz, OK?

JB: Exato, embora não haja um teste explícito.

MCMLX80: Não há um teste.

[20m 40s]

[MCMLX80: Yes, sort of. That is something that I will test later on, right?

JB: Oh, because later on in the first few projects you monitor the work more carefully.

MCMLX80: I do more in-depth monitoring of what he does, OK?

JB: Correct, even though there is no explicit test.

MCMLX80: There is no test.]

Three of these four companies reported having well-established systems for the continuous assessment of translators that are used on an ongoing basis. In two cases, the participants reported using specific software for this purpose (Plunet, OTM). The collected data are then used to assign projects according to each translator's specialization and performance. MCMLX40 explained how they use OTM for this purpose:

Temos um programa de gestão de projeto que se chama OTM, que nos permite ir registando, no caso da relação com os freelancers, como é que a relação corre com os vários gestores de projetos, portanto se os gestores de projetos gostam de trabalhar com essas pessoas e essa informação fica, fica registada e serve também para a decisão, projeto a projeto, quem é que vamos contactar.

[16m 43s]

[We have a project-management software program called OTM that allows us to record, in the case of the relationship with freelancers, how a relationship is going with the different project managers, i.e., if the project managers like to work with those people. This information is recorded and is used to decide, on a project-by-project basis, who we will contact.]

4.4.3.1.2 *Training*

Following the evaluation of the relevance of the above factors for the recruitment process, the participants were asked about the adequacy of university training of translators, and whether there is communication between private companies and universities. Considering the very high value of higher education as a signal picked up in the questionnaire survey, it did not come as a surprise that the vast majority of the small LSPs considered the initial university training of translators to be adequate. Only SCMNO50 had a different opinion:

JB: [...] se consideras que a formação inicial dos tradutores nas universidades é adequada e aqui poderás eventualmente, distinguir um bocadinho entre o primeiro ciclo e segundo ciclo?

SCMNO50: Respondo já, não.

JB: Tanto primeiro, como o segundo ciclo?

SCMNO50: O segundo ciclo mais sim, mas mesmo aí...

JB: Mais no sentido de melhor.

SCMNO50: Melhor, melhor, melhor. Agora a nível de licenciatura, de nível primeiro ciclo, acho que é muito, mas muito lacunar.

[1h 02m 42s]

[JB: [...] if you consider the initial training of translators at universities to be adequate, and here you may possibly make a distinction between first and second cycles?

SCMNO50: I will answer straightaway: no.

JB: For both the first and the second cycles?

SCMNO50: The second cycle more, yes but even in that case...

JB: More in the sense of better.

SCMNO50: Better, better, better. Now, at BA level, first cycle, I think there are really, but really a lot of gaps to fill.]

The remaining participants concurred that translator training at university level is adequate, although they did not agree where the most significant problems lie. SCFNO40 reported that the main areas in need of improving were contact with the market and with technology:

E eu acho que deveria existir um contacto maior de quem está a aprender com realidade do mercado. Que acho que é uma coisa que em alguns casos, hoje em dia, as licenciaturas como são, pós-Bolonha, só têm 3 anos e do meu conhecimento, a maior parte nem estágio tem. Só depois é em mestrado e acho que isso fica algo a desejar e acho que seria importante.

[15m 45s]

[I think that those who are learning should have more contact with market reality. which is something that in some cases, nowadays because undergraduate programs are, post-Bologna, only three years long, and as far as I know most of them don't even have an internship. Only later, during the Master's program, and I think that this falls short and I think it would be important.]

SCFNO40: A questão das ferramentas. Acho que é uma lacuna em todas as universidades no geral.

JB: Ferramentas tecnológicas?

SCFNO40: Sim, ferramentas mais ligadas à nossa área, mesmo as chamadas CAT tools. Acho que conhecem muito pouco, mas é isso. Isso eu acho que não é a coisa mais relevante, porque hoje em dia, a maior parte dos jovens têm muito acesso à tecnologia e a maior parte daquelas ferramentas são muito intuitivas. Ao fim de uma semana a usar a ferramenta qualquer um consegue perceber como é que funciona e onde é que vai buscar as coisas.

[17m 36s]

[SCFNO40: The issue of tools. I think this is a gap in all universities.

JB: Technological tools?

SCFNO40: Yes, tools related to our area, even the so called CAT tools. I think they only know very little, but that's that. I actually don't think that this is the most relevant thing, because nowadays most young people have plenty of access to technology and most of those tools are rather intuitive. At the end of a week using the tool, any person can figure out how it works and where to get things done.]

MCMLX40 had a different opinion regarding the teaching of translation technologies:

[H]á neste momento uma maior, muito maior preocupação na questão das ferramentas de tradução que até uns anos, [...]

Penso que houve uma maior aproximação nos últimos anos das entidades de formação a esta necessidade, não estando ainda no ponto ideal, portanto, eu diria que está a caminhar para ser adequada, principalmente neste sentido.

[20m 34s]

[Right now, there is greater, much greater attention devoted to the issue of translation tools than until a few years ago, [...]

I think that over the last few years, training institutions have become more aware of this need, and although it has not yet reached an ideal point, I would say that it is on track to becoming adequate, especially in this particular regard.]

SCFPO50 also had a positive opinion regarding training in CAT tool use, but she was more critical of the language competence of recent graduates:

É na área linguística, por exemplo. Um tradutor de alemão não sabe falar alemão, geralmente. Os anos de formação em alemão não são suficientes para eles ficarem com bons conhecimentos. Não digo a dominar a língua, mas com bons conhecimentos de alemão. Por isso, por exemplo, um tradutor de alemão, exceto aqueles que são filhos de imigrantes ou viveram na Alemanha ou fizeram o colégio alemão, não têm competências para traduzir de alemão, não conseguem distinguir o plural do singular. Estou a falar em média. Por isso alemão é uma língua que está mesmo muito, muito fraco o ensino. Inglês, não. Inglês diria que são bons, têm bons conhecimentos. Agora, a nível de falta de competências. Eu acho que as competências melhoraram muito a nível das CAT tools. Mas a nível da língua materna está mais fraco. Muitos erros de gramática, mas isso não tem a ver com o curso de Tradução. Vem da base, não é? Acho eu.

[9m 45s]

[It is in the area of language, for example. A translator of German usually cannot speak the language. The years spent learning German are not enough for students to acquire good skills. I don't even mean to say mastering the language, but with good German skills. For this reason, e.g., a translator of German – except for those who are born into an immigrant family in Germany or who have lived in Germany or who have attended a German school in Portugal – they do not have the competence to translate from German: they cannot tell plural from singular. I am talking on average. That's why I think that German is a language where the teaching is really, really weak. For English, no. I would say that for English, the skills are good. Now regarding missing competences. I think that competence has improved a lot as far as CAT tools are concerned. But if we look at mother-tongue skills, the situation is worse. Lots of grammar mistakes, but that is not related to the translation program. It comes from problems in the previous studies, doesn't it? I think so.]

MCMCE30, who also considers the university training of translators to be adequate, provided a more general overview of the quality of young graduates. His company has plenty of experience with internships, and he noted the following about students who join the company for an internship at Master's level:

Nós estamos próximos às universidades e recebemos regularmente estagiários; neste momento temos estagiários connosco. Notamos que obviamente, já recebemos muitos estagiários, uns mais preparados do que outros, mas é que a visão geral que temos é que, de facto, por norma, os estagiários vêm com uma preparação mínima, capaz, para ao fim de pouco tempo serem bastante autónomos, e a fazer um bom trabalho.

[18m 36s]

[We have a close relationship with universities and we regularly receive students for internships; right now we have trainees with us. We obviously notice – we have received many trainees before – that some are better prepared than others, but our global impression is that, actually, students bring with them the necessary preparation that enables them to work independently after a short period of time and perform well.]

MCMCE30 also noted that undergraduate students are equally able to perform well in internships, but in the initial stage of their internship they have more difficulty adapting to the work at the company than do the Master's students.

MCMLX80 treaded very carefully in his global assessment of the adequacy of translator training at university level:

Como formação de base, eu acho que não é má. Está a ver? Depende um bocadinho das faculdades também, OK? Quer dizer há boas e más, não é?

[22m 5s]

[As basic training, I think that it is not bad. You see? It depends a little on the university as well, OK? I mean, there are good and bad ones, aren't there?]

MCMLX80 also pointed to machine translation as an area where he feels universities should put in some extra effort:

Dado a explosão do mercado da tradução automática. Os vários modelos e com a inteligência artificial e com os diversos, as diversas bases de dados que existem e que existem. Eu acho que agora as universidades podiam fazer uma forçazinha para ensinar os tradutores a rever tradução automática.

JB: A chamada pós-edição.

MCMLX80: Pós-edição, exatamente.

[26m 20s]

[Considering the explosion of the machine translation market, the different models and artificial intelligence, and the different databases that exist, I think that now universities could give it a little push to teach translators how to review machine translation.

JB: So-called post-editing.

MCMLX80: Post-editing, that's right.]

The participants were also asked whether communication exists between companies and the academic world. The overwhelming view in this regard it that there is some communication, but also ample room for improvement. Communication occurs mostly within the scope of internships, but even here it does not always go as fluidly as it could. As MCMCE30 points out:

Mas diria também que há espaço para melhorar, que há espaço para uma comunicação melhor até neste ponto, da própria, da própria formação, dos estagiários que recebemos. Eu, assim que me recorde, creio que só de uma das instituições no início da nossa colaboração, portanto quando recebemos o primeiro estagiário, houve o cuidado de o responsável da instituição de vir reunir connosco no Porto. Para nos conhecer melhor, para eu falar um bocadinho daquilo que eles também pretendem para os estagiários, portanto para fazer uma ponte, no fundo fazermos uma ligação, estabelecermos ali uma parceria um bocadinho mais próxima. No fundo, conhecermos as pessoas, sabermos certamente o que

pretendem, eu acho que isso só aconteceu uma vez e isto, este nível do estágio em concreto.

[21m 21s]

[But I would also say that there is room for improvement, there is room for better communication even in this regard, in the actual training of the students that we receive for internships. Off the top of my head, I think that only with one of the institutions at the beginning of our collaboration, i.e., when we welcomed our first trainee, was care taken to have the person in charge at the institution meet with us at our facilities in Oporto. To get to know us better, for me to discuss a bit what they are looking for in their trainees; in short, to build a bridge, to establish a connection, to create a partnership that is a bit closer. All in all, to meet people, to know exactly what they want, I think this only happened once and for this internship in particular.]

MCMLX40, who wears two hats as a company co-owner and translator trainer at university level, also said that communication between companies and universities can improve, even on very practical matters of curricular internships:

Eu posso dizer, por exemplo, mais uma vez fazendo um esforço para estar só do lado da empresa, quando há um estágio curricular, muito raramente há, digamos, avaliação do lado da entidade, que seja, digamos, discutido com a entidade formadora, com a universidade ou com a, com a faculdade. Quando me parece que que devia haver um...Não sei, que aqui a comunicação também devia ser um pouco melhor.

[22m 57s]

[I can say, for example, once again making the effort to speak only from the company's perspective, when there is a curricular internship, very rarely is there an opportunity to discuss the evaluation with the training institution, with the university or with the school. And it really seems to me that there should be... I don't know, that communication in this regard should also be a bit better.]

Communication between companies and researchers in the field of translation studies is close to non-existent, according to MCMLX40. He added that it appears that these two sides have their backs turned to each other:

A investigação académica que se faz, muitas vezes, é completamente ignorada pela pelo lado empresarial, e muita da investigação que se faz também ignora o lado empresarial, portanto aí também parece que há uma grande barreira.

[24m 48s]

[The academic research that is being done is often completely ignored by the corporate world, and a lot of the research that is done also ignores the corporate world, so it seems that there is some sort of large barrier here.]

It is therefore unsurprising that, when asked about possible avenues for collaboration between companies and universities, most participants answered generically, along the lines of establishing deeper ties between these two sides through conferences or mutual visits. Only MCMCE30 and SCFPO50 put forward more specific potential initiatives for collaboration. SCFPO50 mentioned a course for project managers that was being setup by the European Union Association of Translation Companies (EUATC) with the collaboration of teaching staff from universities. MCMCE30 raised the possibility of studies bridging the gap between universities and companies:

Um maior estudo, realmente daquilo que são as necessidades nacionais a este nível, que tipo de necessidades existem? Quais são os requisitos habituais, como é que se interligam melhor ou pior, alguns destes serviços e competências, distinguir, pois, as próprias competências daquilo que são os linguistas, um linguista que faz copywriting, de um que faz uma tradução mais técnica...

[24m 56s]

[A more comprehensive study of what are really the national needs at this level, what kind of needs exist? What are the usual requirements, how do they interconnect better or worse, some of these services and competences, distinguishing the competence of linguists, a linguist that does copywriting from the linguist that does more technical translation...]

Still within the field of training, two participants mentioned self-learning as an important tool to keep up-to-date, especially in the area of translation technologies, where abundant resources are available online for free.

4.4.3.1.3 *The Impact of new technologies*

The next section of the interview was dedicated to the impact of new technologies on each company and its processes. All the participants reported some level of transformation due to technological changes. SCFPO50, owner of one of the smallest companies in the study, reported very significant changes:

Sim, a *empresa* sofreu várias alterações devido às novas tecnologias, sem dúvida, desde mais software, software de gestão, software para apoiar a tradução, software de tradução automática. Vários. Eu acredito que as empresas de tradução, em breve serão mais empresas tecnológicas do que tradução como nós as conhecemos.

[13m 48s]

[Yes, the *company* underwent several changes due to new technologies. No doubts about that. From more software, management software, software to support translation, software for machine translation. Several. I believe that translation companies will soon be more like tech companies than translation companies as we know them.]

Computer-assisted translation (CAT) tools are widely used across all participant companies. Many of these companies have also incorporated machine translation (MT) into their workflows, although to different extents. Most commonly, companies reported using MT at the request of clients. However, participant SCFPO50 also reported an increasing use of MT internally:

JB: A tradução automática já é uma ferramenta relevante, nos vossos projetos, ou ainda é residual?

SCFPO50: Não, diria que já é relevante, sim. Sim, já recorremos bastante a tradução automática.

JB: E recorrem em geral por iniciativa vossa ou normalmente a pedido dos clientes?

SCFPO50: Não, por iniciativa nossa. Há clientes que o permitem, sim, há clientes que o permitem, mas há muito trabalho que a tradução automática vai acelerar, sem dúvida.

[14m 31s]

[JB: Is machine translation already a relevant tool in your projects or is it still marginal?

SCFPO50: No, I would say that it is relevant, yes. Yes, we already use machine translation quite abundantly.

JB: And do you generally use it of your own initiative or do you normally use it at the request of clients?

SCFPO50: No, we do it out of our own initiative. There are clients that allow it, yes, there are clients that allow it. But there is a lot of work that machine translation will accelerate, no doubt.]

MCMLX80 reported not only using MT extensively, but also being in the process of having his company certified under ISO 18587:2017, a standard for the post-editing of machine-translation output:

MCMLX80: Fiz a certificação da tradução e agora, este ano, vou fazer a certificação da nova norma que saiu que eu nem sei o número de cor, que é da revisão de tradução automática,

JB: 18000 e qualquer coisa.

MCMLX80: 18000 e qualquer...

JB: É um número estranho, não é redondo.

MCMLX80: É um número estranho, não é? Mas já falei com a SGS, eles também nunca fizeram e estamos a preparar, quando agora fizer a nova certificação nova, que é todos os anos que a gente tem que a renovar. Quando a renovar agora no fim deste ano já vão fazer e 17001 e a 18000 e qualquer coisa. Porque efetivamente o trabalho está a mudar muito, em termos de daquilo, daquilo que me chega, não é? Tá mudar muito e a mudar muito, sobretudo para a área da revisão da MT, da

tradução automática, né? Portanto, ótimo, tudo bem, desde que haja, desde que haja mais trabalho...

[13m 01s]

[MCMLX80: I did the certification for translation and now, this year, I will do the certification for the new standard that was published, and I don't even know the number by heart, it's the one about post-editing machine translation.

JB: 18000 something.

MCMLX80: 18000 something...

JB: It is a strange number, it's not a round number.

MCMLX80: It's a strange number, isn't it? But I have spoken to SGS, they haven't done it before either and we are preparing, when the time comes for the new certification, a renewal which happens every year. Upon renewal, at the end of this year, they will be doing 17001 and 18000 something. Because, effectively, work is changing substantially in terms of what I receive, isn't it? It's changing substantially and changing substantially into the area of MT post-editing, right? So, great, I'm fine with it, as long as there is, as long as there is more work to do ...]

MCMLX40 also signaled a transition to wider use of MT:

Enquanto clientes que nos pedem particularmente para fazer pós-edição é residual ainda, mas enquanto técnica já usada pela maior parte dos tradutores não, não é. A maior parte dos tradutores em muitas áreas estavam usar já ferramentas de tradução automática para nós.

[8m 56s]

[As regards clients that specifically ask us to do post-editing, this is still marginal. But as a technique, it is already used by the majority of translators, right? The majority of translators in many areas were already using machine translation tools when working for us.]

However, MCMLX40 also reported some growing pains with this informal transition:

Os nossos tradutores habituais não estão a receber da nossa parte tradução automática com redução de valor, digamos assim, ou seja nós não lhes estamos a pedir para fazer algo diferente do que já faziam, no sentido em que em que não estamos a pagar menos, estamos a pagar exatamente o que sempre pagávamos, mas fazemos apoio, damos apoio técnico e mesmo ajudamos na ligação a ferramentas, não é, de tradução automática, principalmente DeepL, neste caso é, mas estamos, estamos a neste momento a estudar o uso de outras ferramentas mais especializadas para alguns dos nossos clientes. Ou seja, nós não estamos a pedir um serviço diferente, mas estamos a dar a possibilidade de usar esse serviço, sendo que esta transição não está a ser muito fácil, porque, digamos aí há uns dois anos. Estou a dizer dois anos, mas não estou a ser muito preciso. Talvez dois/três anos. Sentimos da parte de alguns dos tradutores habituais com quem trabalhamos freelancer. Neste caso, uma quebra de qualidade relativamente marcada. Chegámos à conclusão depois de várias conversas com eles, que estava que estava relacionada com a utilização, não muito, digamos, não muito bem feita das ferramentas de tradução automática por iniciativa dos próprios tradutores. [...] E neste momento estamos numa fase em que não só permitimos, como ajudamos à utilização destas, destas ferramentas, mas que as coisas fiquem bem feitas.

[9m 25s]

[Our regular translators are not receiving from us machine translation with a reduction of price paid. Let's put it like this: we are not asking them to do something different from what they already did, in the sense that we are not paying less for it: we are paying exactly the same as we always did, but we give support, we provide technical support and we actually help with the connection to tools of machine translation, mainly DeepL, in this case. But we are, right now, we are evaluating the use of other more specialized tools for some of our clients. I.e., we are not requesting a different service, but we allow them to use that service, although this transition hasn't been easy. In fact, some two years ago... I'm saying two years, but I'm not being very exact. Maybe two or three years. We felt a steep drop in quality from some of our regular freelance translators. We came to the conclusion, after several talks with them, that it was related to a not so correct use of the machine translation tools by the translators. [...] Presently, we are at a stage

where we not only allow, but we also provide help for the use of these tools, in order to get the work done properly.]

At a later stage of the interview, MCMLX40 added that the momentum behind MT is very strong:

Pois bem, o que eu posso dizer é que eu é o seguinte: a tradução automática, é, parece-me ser uma revolução muito forte, e talvez não diria o mesmo há cinco anos, mas a qualidade, que não é ideal, claro, mas é, é uma ferramenta que os tradutores podem usar.

[39m 09s]

[Well, what I can say is the following: machine translation is, it seems to be a very strong revolution, and I probably wouldn't have said that five years ago. But the quality, which is not ideal, of course, but it is, it is a tool that translators can use.]

SCMNO50 reported that a similar trend towards increasing MT use is also noticeable in the classroom, among students in translation programs, with impact on the quality of translation:

Mas eu, nas minhas aulas, estou cada vez mais incorporar isso, a tentar incorporar isso, e posso dizer, por exemplo, que agora no segundo semestre é uma das coisas que é uma das preocupações que eu estou a ter. E eu estou na fase de revisão e correção de trabalhos. E começamos a entrar num nível, eu estou a falar de formação, não é, dos alunos. Começamos a entrar num nível um pouco preocupante. Da forma como, por exemplo, eu leciono tradução especializada. Portanto, traduzimos textos, fazemos projetos na área do direito, da economia, das ciências e de informática. Pronto, e de repente é... A questão da qualidade da tradução. Começa a ser bastante questionável. Ao mesmo tempo, os trabalhos acabam por ser praticamente iguais, porque é se percebe que aquilo vem da mesma fonte.

[40m 17s]

[But, in my classes, I am incorporating it more and more, trying to incorporate it, and I can tell you, for example, that now in the second semester, it is one of the

concerns that I am having. I am at the stage of reviewing and correcting student work. And we get to a level, I'm talking about training, right, of students. We are getting to a somewhat concerning level. For example, how I teach specialized translation: we translate texts, we do projects in the area of law, economics, sciences and computing. There, and all of a sudden it's... The issue of the quality of translation. It's becoming quite questionable. At the same time, all the projects end up being almost equal, because you can tell that everything is coming from the same source.]

According to SCMNO50, this will require an updated pedagogical approach:

Acho começam cada vez mais cedo, no primeiro ano da licenciatura. Já a trabalhar com isso. E eu acho que é... Não é dar um Ferrari, uma pessoa que não tem carta, mas é um bocado, mas é um bocado, é colocar nas mãos de uma pessoa, é uma ferramenta, que não sabem é a potencialidade. Não é questão de demonizar, porque eu não. Não estou. Não estou aí, né? Não vou dar esse para esse peditório naturalmente, mas acho que é um esforço nessa educação, digamos, dessa pedagogia do que é trabalhar com tradução automática, ver quais são os padrões e regularidades de erros, por exemplo, preparar os alunos para um processo de tomada de decisão muito mais assertivo e mais focado.

[42m 10s]

[I think they begin earlier and earlier, already in the first year of their undergraduate program. Working with that. I think it's... It's not like giving a Ferrari to someone that does not have a driver's license, but it's a little bit, it's a little bit like giving someone a tool whose potential they are unaware of. It's not about demonizing, because I... It's not my thing, right? I won't go in that direction, naturally, but I think that an effort invested in that education, let us say, that pedagogy of working with machine translation, checking for patterns and regularities of errors, for example, preparing students for a decision-making process that is much more assertive and focused.]

Some participants also shared their views on the potential of MT as a driver of change and, specifically, unemployment. SCFNO40 stressed that technology will be essential for companies to survive:

E acho que o mercado, com tudo aquilo que vai sendo mais automatizado, vai perder em algumas coisas, mas uns perdem, outros ganham. É um bocado assim. Acho que no fundo, aquelas empresas que não estiverem tão viradas para a tecnologia – porque eu continuo a conhecer a empresas ainda que trabalham numa base muito arcaica, digamos assim, para a realidade que temos hoje em dia. Acho que vão acabar por ter tendência para desaparecer, porque vai ser muito difícil manter esse tipo de trabalho.

[28m 04s]

[And I think that the market, with everything that is becoming more automated, is going to lose in a few areas. But while some lose, others will gain. It's a little bit like this. Actually, I think that those companies that aren't as technology-oriented – because I know of companies that still work on a very archaic basis, let's put it like this, for the reality that we live in. I think that they will tend to disappear because it will be very hard to keep that kind of work.]

SCFPO50 added that MT would tend to put translators out of work, and only specialization might mitigate this trend:

A nível dos tradutores, acho que os tradutores, mesmo com formação em línguas tendem a perder o seu trabalho, ou vão tender a perder o seu trabalho. É uma visão um bocadinho negativa. E vão-se manter tradutores especializados, altamente especializados e técnicos. De algumas áreas. Por isso um tradutor não especializado, só com conhecimento de línguas, eu acho que não vai ter muito trabalho, a nível das competências.

[16m 28s]

[As far as translators are concerned, I think that even those with training in languages tend to lose their work, or rather they will tend to lose their work. It is a somewhat negative vision. Specialized translators, highly specialized and technical, they will remain in the market. In some areas. Therefore, a translator that is not specialized, somebody who only knows languages, personally I think that this person will not have a lot of work, as far as competences are concerned.

MCMLX40 pointed out that translators who work very fast at the expense of quality will be among the first to feel the bite of MT:

Os tradutores que são menos cuidadosos e que, por exemplo, ganhavam muito pelo facto de serem muito, digamos, muito rápidos e precisavam de uma de uma revisão mais profunda, estão a perder claramente para a tradução automática, porque a tradução automática está a chegar a níveis próximos desses maus tradutores, se podemos assim dizer.

[35m 33s]

[Translators who are less careful and who, for example, earned a lot of money for being, say, very fast and needed a more careful revision, they are clearly losing out to machine translation, because machine translation is reaching levels close to those bad translators, if we can put it like this.]

The negative impact on specific roles and rates was highlighted by MCMCE30:

Eu acredito que, infelizmente, por exemplo, em algumas áreas o tradutor técnico, em algumas áreas, vai perder relevância por força da tradução automática, porque não é competência técnica. É onde... Porque a técnica normalmente é mais repetitiva, e é onde os motores têm maior facilidade em contextualizar por norma e acredito que na tradução técnica é onde vamos sentir, e os tradutores técnicos vão sentir um bocadinho mais esse impacto. E esse impacto o que faz, para além da questão da redução das tarifas, obviamente o volume de trabalho, porque se trabalha mais rápido, o volume de trabalho pode não chegar a todos, o que de uma forma geral, chegaria mais pessoas. porque não havendo tradução automática, os trabalhos eram mais complexos, mais demorados, maior necessidade de distribuir por mais tradutores, portanto, haveria mais oportunidades do que poderá haver no futuro.

[36m 49s]

[I believe that, unfortunately, for example in some areas, the technical translator will lose relevance due to machine translation, because it's not technical

competence. It's where... Because technical translation is usually more repetitive, and it's where the machine translation engines have greater ability to extract context, I believe that in technical translation is where we will feel it more, and technical translators will feel that impact a bit more. And that impact, on top of rate reduction, obviously on the work volume – because we work faster – the work volume may not be enough for everybody, contrary to what happened before, when it reached more people because in the absence of machine translation projects were more complex, more lengthy, and there was a greater need to distribute work across more translators, therefore there were more opportunities than may be the case in the future.]

SCMNO50 reported that this major shift in the provision of translation services was already affecting students entering the job market:

Mas é um fenómeno que eu estou, que eu estou a reparar que é por muitos dos meus alunos, que estão agora a entrar no mercado ou pelo menos estão a fazer o seu estágio é que a nova configuração do mercado, com estas, com a tecnologia, acaba por criar aqui um efeito de bolha, que, ao mesmo tempo, dificulta a integração dos alunos no mercado, no mercado, precisamente porque ou por ausência de qualificações ou pelo menos, até por ausência de ofertas de trabalho me parece algo complicado em termos de gestão.

[30m 46s]

[But a phenomenon that I am noticing is that many of my students who are now entering the market or who are doing their internship, the new market configuration with these new... with technology is creating a bubble effect, which also makes it harder for students to enter the market due to missing competences or even due to non-existent job offers, which strikes me as something that is complex to manage.]

I also asked the participants if they had somehow diversified the services they provide as a response to the changes they were seeing in the market. Most participants mentioned that they remained focused on their traditional lines of business. Only MCMCE30 reported a shift and an increase in the area of transcreation and creative translation but not directly as a result of the technology changes.

Finally, in this section of the interview, participants were asked to rate the relevance of technological competence in the recruitment process. This question was copied from the survey questionnaire in order to determine whether there had been any change regarding this specific competence.

All participants rated this competence as Relevant or higher. In the survey questionnaire, technological competence also reached a high mean value of 4.22 for prospective in-house translators and 4.36 for prospective freelance translators (on a scale of 1 to 5). However, it should be noted that in both cases it was considered the third least important of the eight competences evaluated.

Two participants clearly stated that CAT tools were either fairly easy to learn or that the competence was easily transferred from one tool to another. According to SCFNO40, who ranked the competence as important:

[A] maior parte dos jovens têm muito acesso à tecnologia e a maior parte daquelas ferramentas são muito intuitivas. Ao fim de uma semana a usar a ferramenta, qualquer um consegue perceber como é que funciona e onde é que vai buscar as coisas.

[17m 58s]

[Most young people have plenty of access to technology and most of these tools are very intuitive. By the end of a week using the tool, anyone is able to understand how it works and where to get all the items.]

MCMCE30 shared a similar view and also mentioned that the company provided support for onboarding new tools, stressing the cooperation between company and translator:

Eu diria um intermédio relevante, mas contextualizando: relevante porque, por norma, também há pelo menos um mínimo conhecimento dos tradutores de alguma ferramenta. Também não é tão habitual, atualmente, um tradutor não trabalhar, passo a publicidade ou com um [Trados] Studio, com MemoQ ou com o Smartling. À partida já sabe trabalhar pelo menos com um deles. Sabendo trabalhar com um deles, naturalmente, nós também damos o apoio necessário para que possa aprender a trabalhar com os outros. Mas, verdade seja dita, sabendo trabalhar com um –

obviamente que são diferentes – mas o conceito, a forma como trabalham normalmente é a mesma. Muitas vezes a questão é saber onde está a função deste no menu e a função do outro no menu, depois é encontrarmos. Eles trabalham quase da mesma forma, portanto, eu diria que é um relevante, porque normalmente o tradutor sabe pelo menos uma. Sabendo uma, depois terá facilidade. Nós vamos prestar o apoio para que trabalhe com as outras. Não digo muito relevante porque aqui na minha ideia, pelo menos ao responder à questão não é muito relevante que saiba uma panóplia muito grande de ferramentas porque nós estamos também estamos cá para apoiar nesse sentido.

[30m 19s]

[I would say medium relevant, but to put it in context: relevant because usually translators have a minimum knowledge of one of the tools. It's not that common nowadays that a translator does not work with [Trados] Studio, MemoQ or Smartling. So we can assume that they can work with at least one of these. And if they know how to use one of these, we will naturally also provide the necessary support so that they can learn how to use the others. But the truth be told, if you know how to use one – they are obviously different – but the concept, the way they work, it's usually very similar. Often the issue is only about knowing where a specific menu function is located in one program and where the equivalent function is located in a different program. Then we try to find it. They work in very similar ways, so I would say that it is relevant, because usually the translator knows at least one tool. Once they know how to use one, it will be easier. We provide support so that they can use the other tools. I won't say very relevant because, as I see it, at least when answering this question, it is not very relevant to know a wide array of tools, because we are here to help in that particular regard.]

MCMLX80 is the standout in this group of companies. When asked to rate the relevance of technological competence, he used values literally off the chart and tied this evaluation with productivity, which in turn was considered key to survive in an environment of falling rates:

5, 7, 8, 9, 10. Ele tem que perceber para que serve aquela ferramenta. Tá a ver? Ele tem que perceber que uma ferramenta daquelas lhe dá a capacidade, a capacidade

de poder aceitar trabalhos a valor mais baixo porque a sua produtividade é muito maior. Está a ver o que estou a dizer? Mas tem que dominar essa ferramenta. E se você vir, eu tenho, eu tenho, tenho a experiência disso. A maior parte dos tradutores não dominam a ferramenta para lhes facilitar o trabalho e para lhe aumentar a produtividade. Aumenta até uma certa altura, porque eles utilizam as memórias de tradução porque isto e porque aquilo e aqueloutro, mas há uma data de funcionalidades que eles não sabem usar. E às vezes até pergunto se querem, não é, que lhes podia aumentar mais a produtividade e a qualidade e que fazia com que eles pudessem traduzir muito mais. Traduzir ou rever, enfim, que pudessem ganhar mais dinheiro ao fim e ao cabo.

[29m 26s]

[5, 7, 8, 9, 10. They must realize what that tool is for, you see? They must realize that a tool like that gives them the ability to accept work at a lower rate because their productivity is much higher. Do you see what I mean? But they must master the tool. I have first-hand experience of this. Most translators do not master the tool so that work becomes easier and productivity is increased. It increases up to a certain point because they use translation memories, and because of this and that, but there are a number of features that they do not know how to use. I sometimes ask them if they would like to know, because it could increase productivity and quality, and they would be able to translate much more. Translate or review. At the end of the day, it would be something that would enable them to earn more money].

No participant from this group of small LSPs spontaneously mentioned skills related to MT in this specific question, which suggests that at this point in time those skills (post-editing or pre-editing) were not yet relevant despite the broad use of MT reported in previous answers. These skills are only mentioned in subsequent segments of the interview about the future of translation.

4.4.3.1.4 Perspectives for the future

Automation, in particular machine translation, is cited throughout the interviews as a factor that is changing the landscape in the translation industry. Projects are becoming

bigger and deadlines shorter. MCMLX80 uses DeepL, a commercial MT solution, to illustrate the evolution of this technology and its impact on rates:

O DeepL, as bases de dados do DeepL, agora traduzem quase tudo. Você mete um documento de, sei lá. 50000 palavras, no DeepL e para aí 10 minutos depois tem a tradução, tem que fazer a pós-edição. Não se compara do que era antes que um tradutor fazia 2500 palavras por dia, mesmo com memórias de tradução é 2500-3000, no máximo 3500 palavras dia e prontos, demorava a fazer aquilo. Não é? Portanto, neste momento as coisas são... Têm que ser muito mais rápidas, têm que ter a mesma qualidade, são pagas ao preço da uva mijona, desculpe o termo.

[36m 44s]

[DeepL databases now translate almost anything. You provide them with a document of let's say 50000 words, and some 10 minutes later you have the translation ready for post-editing. You cannot possibly compare this with the previous setup, where a translator would do 2500 words per day, even with translation memories that's around 2500-3000, maximum 3500 words per day, so it took some time, didn't it? Therefore, presently things are... They have to be much faster, they need to have the same quality, and they are paid at bargain prices.]

Preparation and speed are also mentioned by MCMCE30 as increasingly important in a globalized world:

A internet, a capacidade, que é cada vez mais forte, de trabalharmos de forma global, obriga-nos a ser cada vez mais rápidos nas respostas que damos e quando digo a resposta a todos os níveis, tanto a prontidão e a capacidade de fazer rápido vão dominar cada vez mais, a isto vai estar aliado, obviamente, este bicho papão de que vamos falando muitas vezes que é tradução automática, que obviamente que nos vai ajudar nesse sentido, dentro daquilo que são as áreas onde a tradução automática é, de facto uma mais-valia.

[34m 05s]

[The internet, the ability – stronger than ever – to work globally, forces us to be increasingly faster in the responses that we provide, and I mean responses in every

possible way. Both preparation and the ability to do things quickly will become dominant, and this will be tied to this “boogie man” that we frequently talk about called machine translation, which will obviously help us in that regard, within the fields where machine translation does in fact provide added value.]

Automation also has the ability to transform training in this field, which could be said to be at a crossroads. SCMNO50 cast doubt as to the future of translation as an intellectual profession:

A questão pós-edição, muito embora me incomode o facto de... Nesta altura, os nossos alunos e muitos dos tradutores acabam por entrar naquela lógica da cadeia de montagem em que nós estamos no final do... Estamos a ver a qualidade das peças, não é do automóvel ou do fabrico. À procura de erros. E essa questão do trabalho, de um trabalho que é intelectual, sólido, científico, com processos cognitivos muito, muito sólidos, de repente acaba por ser incerta.

[45m 56s]

[The issue of post-editing, although I am disturbed by the fact that... Presently, our students and many translators end up in this assembly-line logic where we are at the end of... We are checking the quality of the parts, not the automobile or the production. Looking for errors. And that whole question of a work that is intellectual, solid, scientific, with very solid cognitive processes, suddenly becomes very uncertain.]

Participants were asked about the outlook for translation as a professional activity, specifically which roles might gain or lose importance in the future. They were also invited to elaborate on what new or improved competences might be requested from translators.

SCFNO40, the owner and manager of the smallest LSP represented here, pointed to the need to improve language competences, in particular for L1. Other forms of technology, like messaging on mobile phones, caused young translators to pick up bad writing habits. A similar criticism of poor language competence was made another participant, SCFPO50, in her interview. For the future, SCFNO40 saw technology

gaining relevance and, as a result, highly specialized roles such as terminologists would probably lose importance, as their work could be replaced to an extent by electronic tools.

MCMLX80, on the contrary, mentioned that in his opinion terminologists and project managers would gain importance in a world where MT would become prevalent. He also saw post-editing as a transitory role in the translation process, as quality would increase to a level where post-editing is no longer necessary in its current format. According to this company owner, translators must overcome a certain resistance to technology and develop strong technological skills that enable them to be part of the process and understand how to use the technology to their advantage:

Portanto, as competências tecnológicas têm que ser grandes, as outras são a utilização dos sistemas de tradução automática e então, e começar a terem eles a própria noção da escolha que têm que fazer nos sistemas de tradução automática. Portanto a começar a ver para todas aquelas coisas que a gente tem, os índices de BLEU, quer dizer, ver quais são os melhores para aquela área. Testar. Quer dizer, têm que começar a entrar no processo tecnológico para escolher.

[40m 57s]

[For this reason, technological competence must be significant; other skills are using machine translation systems and being aware of the choices they have to make in machine translation systems. I.e., consider all the options available to them: BLEU indices, I mean, checking what the best ones are for that particular area. They have to get into the technological process to make choices.]

MCMLX40 also highlighted MT as an important skill for the future:

Saber usar bem a tradução automática parece-me ser essencial. Porque o que sinto é que estamos, nós estamos a caminhar para um modelo em que, em vez de aquilo que temos hoje: tradicionalmente de tradução, revisão por um segundo tradutor e depois verificações e depois a entrega, estamos a caminhar a passos muito claros para pós-edição. Ou melhor, tradução utilizando tradução automática e pós-edição, sendo a pós-edição a revisão, ou seja, há um passo que desaparece e este, o tradutor tende a ser o revisor, de funções... O revisor de uma tradução já foi automática.

[34m 30s]

[Knowing how to use machine translation proficiently seems essential to me. Because I feel that we are heading towards a model in which, instead of what we traditionally have today – translation, review performed by a second translator and then checks prior to delivery – we are heading very decidedly to post-editing. Or to put it better, translation using machine translation and post-editing, where post-editing becomes reviewing and therefore one step of the process disappears, and the translator tends to become the reviewer, a role... The reviewer of a translation that was performed automatically.]

However, since MCMLX40's company caters to local end clients, customer service is particularly important. It is thus unsurprising that he also mentioned other minor technological skills as relevant in the medium term:

Os clientes valorizam muito naquilo que fazemos, que nos pedem muito, são questões técnicas, acessórias e que muitas vezes os alunos não estão... As pessoas que saem das faculdades não estão tão, digamos, cientes de que vai ser tão importante questões acessórias como a preparação de ficheiros ou questões técnicas, como a conversão de formatos ou DTP, ou seja, preparação gráfica ou o ajustamento de PowerPoint. Coisas que parecem muito acessórias. Ou a transformação de um PDF para Word para poder ser traduzido, tudo isso não está a ser substituído minimamente pela, ou seja, não está a ser tão automatizado como até se calhar podia.

[33m 12s]

[Clients value and very frequently request technical, ancillary tasks that students usually are not... People coming out of universities are not, let's put it like this, aware that ancillary tasks such as file preparation or technical tasks like converting between formats or DTP, i.e., desktop publishing, or adjusting PowerPoint presentations will be very important. These things seem very secondary. Or transforming a PDF into Word in order to be translated, none of this is being replaced, i.e. it's not being as automated as it possibly could be.]

MCMLX40 highlighted the importance of language competence for the future, in particular to face the competition of MT in many areas of translation:

Portanto, mesmo as competências linguísticas mais centrais tornam-se mais importantes perante a concorrência com a tradução automática que chega a níveis de tradutores humanos com menos experiência ou com maus hábitos com más práticas, se quisermos assim. [...] Os tradutores que fazem um ótimo trabalho linguisticamente que também sabem usar bem as ferramentas e que conseguem usar esta ferramenta de tradução automática para se poderem concentrar naquilo que é difícil e que pode ser e pode ser melhorado... Esses tradutores enfim vão ter trabalhos cada vez mais difíceis, porque os mais fáceis vão começando as partes fáceis dos textos vão começando a estar cada vez mais traduzidas automaticamente, mas não me parece que tenham dificuldades futuras.

[35m 56s]

[Therefore, even the most core language competences become more important in the face of competition with machine translation that reaches the level of less experienced human translators, or human translators with bad habits or bad practices, if we want to put it like this. [...] Translators that do a great job linguistically and that can also use tools correctly – and who are able to use this machine translation tool to focus on what is difficult and can be improved... These translators will have increasingly more difficult projects, because the easy ones, and the easy parts of texts will more and more be translated by machines, but I don't think that they will face difficulties in the future.]

Finally, MCMLX40 also mentioned that the teaching of post-editing at university level is not as widespread as it should be, considering how important it has become.

SCFPO50 mentioned that translators, especially non-specialized translators, would tend to become out of work in the future. In fact, at the time of the interview her company was soon to open a recruitment process for specialized translators, and she was not planning to hire translators trained only in translation:

[E]u vou começar a contratar pessoas de outras áreas. Aliás para a semana, vou colocar anúncios para pessoas formadas em direito, e em economia ou gestão. Vou deixar de contratar tradutores tradutores (sic).

[19m 21s]

[I am going to start hiring people from other areas. In fact, next week I will publish ads for people with a degree in law, economics or management. I will stop hiring translators trained in translation.]

However, a job ad for a translator (remote work) published by this company on LinkedIn and on translator groups shortly after the interview specifically requested a university diploma in languages/translation or business management. This suggests that the company is not yet in a position to exclude translators trained in translation, despite the intention stated above. Other LSPs in this study, especially larger LSPs, have reported some difficulty in attracting talent from other areas.

As far as new roles or competences are concerned, SCFPO50 cited emerging jobs related to data processing for use in MT and voice processing, for example.

For MCMCE30, post-editing was here to stay and he deemed that this trend would affect mostly technical translators. Nevertheless, he also noted a trend to specialization in more creative areas that are currently beyond the reach of MT:

Já começamos a ver muitos colegas especializarem-se, e eu acho que vai haver uma demanda maior, que é precisamente na área criativa e da publicidade, onde serviços como a transcrição, aparecem agora ganhar terreno e ser cada vez mais relevantes. Começa a chegar ao cliente final o conceito de transcrição e a necessidade de procurar um transcriador. No fundo o tradutor mais criativo...

[35m 08s]

[We have started to see many colleagues specializing – and I think there will be greater demand for this – precisely in the area of creative translation and advertising, where services like transcreation now appear to be gaining ground and becoming more relevant. The end client is becoming aware of the concept of transcreation and of the need to look for a transcreator, a more creative translator...]

Online advertising was also signaled by MCMCE30 as an area of growth, with services like search engine optimization (SEO) and copywriting becoming potential areas of work for future translators.

In his role as a translator trainer, SCMNO50 inevitably pointed to the impact of these changes on translator-training institutions. His discourse is revealing of the magnitude of the transformation at hand:

Pois eu... Eu não sei, eu não sei muito bem se daqui a uns tempos ou já, nós podemos estar a podemos estar a falar apenas de tradução. Não sei o que, não sei o que vai acontecer, ou melhor sei o que é que vai acontecer. Nós já não estamos a formar tradutores.

[44m 57s]

[Well, I... I don't know, I don't know if in a not so distant future, or now, we can be speaking only of translation. I don't know what, I don't know what is going to happen; actually, I do know what's going to happen. We are no longer training translators.]

He then elaborated on this idea, noting that the traditional stage of translating in the translation process is being emptied and the competences are being shifted to later stages in that process, like post-editing, reviewing or quality control:

Pronto, portanto, já não faz sentido maneira como nós ensinamos a tradução. É decompor aquilo em modelos estanques, com a mesma duração e com a mesma complexidade, porque através, não digo de tradução automática, mas mesmo uma CAT tool, essa fase de pré- e tradução acaba por ser feita em questão de segundos, portanto, de repente nós estamos a investir muito mais na questão da qualidade, na questão da pós-edição.

[45m 57s]

[So, therefore, it no longer makes sense how we teach translation. Decomposing everything in watertight models, with the same duration and the same complexity... Because using – I won't say machine translation – even a CAT tool, this stage of

pre-translation and translation ends up being done in a matter of seconds, so suddenly we are investing much more in the issue of quality and post-editing.]

During this stage of the interview, some participants gave their views on the industry as a whole. MCMLX80 and SCFPO50 specifically mentioned that greater concentration in the industry is a strong trend which will take smaller competitors out of business, and larger companies will also benefit from a greater ability to allocate capital to increase the use of technology.

These two participants were also questioned about the role of associations in the sector. While SCFPO50 (a non-APET member) deemed the work of associations to be positive, MCMLX80 (a former APET member) highlighted that APET had not been able to play a mediator role that would enable companies to merge and combine efforts, leaving smaller companies more vulnerable in the future.

SCFPO50 also suggested that universities should focus more on practical training, foster more exchanges with companies and hire professional translators to infuse new ideas and methods in a traditionally closed learning environment. Among these market-driven suggestions, she was particularly adamant about dropping highly theoretical subjects:

[H]á coisas que eu acho que não fazem sentido ainda ensinar, por exemplo, teoria da tradução de 1500 e acho um disparate, acho que estamos a perder tempo. Acho que tem de ser muito mais prática.

[21m 45s]

[There are things that, personally, I think it no longer makes sense to teach, like the translation theory of [the year] 1500. I think this is nonsense, and we are wasting time. I believe it must be much more practical.]

In the final question of the interview, I asked participants about whether they felt optimistic or pessimistic about the future.

MCMLX80 felt pessimistic, fearing that the future would bring many companies to an end. SCMNO50, a translator trainer and former head of an LSP, was largely optimistic for translation as a field of research and teaching, but he had a more pessimistic

view on the impact of new technologies like MT, especially for those agents who fail to adapt to change and for new entrants in the market.

All other participants felt optimistic about the future. According to MCMCE30, the need for translation would not disappear and technology still had a way to go:

[...] estou otimista, estou otimista, claramente. [...] estou muito confiante, muito otimista de que não há muito por onde fugir. Os tradutores continuam, vão continuar a ser necessários, sempre foram, não há inteligência artificial capaz de desconstruir por completo aquilo que é comunicação e construí-la isoladamente, sem intervenção humana. Pelo menos, não estamos nesse tipo de tecnologia ainda. Não parece que num futuro próximo isso seja possível, apesar dos grandes progressos que tem havido, alguns até bastante impressionantes.

[39m 03s]

[I feel optimistic, I feel optimistic, clearly. [...] I am very confident, very optimistic that there is no way around this. Translators continue to be, they will continue to be necessary, they have always been and there is no artificial intelligence able to completely deconstruct what is communication and construct it in isolation, without human intervention. At least, we have not yet reached that kind of technology. It doesn't seem to me that this will be possible in the near future despite the great advances that have been made, some of which are quite impressive.]

This view was widely shared across the small LSPs. Such optimism is not uncommon among business leaders, as belief in the future of a company is one of the reasons to remain in business. Actually, the one participant with a clearly pessimistic view of the future was the only one who openly cast doubt about the future of his company in an environment of MT and low rates. He was also the oldest participant in this set of interviews.

Finally, I would add that SCFPO50 and MCMLX40 reported that they would soon be starting recruitment processes for in-house staff, which is an important signal of optimism. However, this optimism does not necessarily reflect positively on translators who have a background in university studies in translation, as SCFPO50 said their intention was to stop hiring translators specifically with a background in translation, and

MCMLX40 announced that the company would be opening a position for a project manager.

4.4.4 Large LSPs

Two companies in this study can be considered large LSPs, especially in local market terms. Both have a permanent staff of close to 20 people and annual revenues of around one million euros. One dates back to the early 1980s, while the other was created in 1998. One of these companies was recently sold to a German group, but the current manager has close family ties to the former owners. Two of the three participants interviewed for this section of the study belong to the same company, although they are two different generations of management.

According to their LinkedIn profiles, participants LCMLX40 and LCFLX40, who are currently general managers at their respective companies, have taken courses in management on top of their graduate degrees in translation and communication, respectively.

These two companies operate at a more international level than the smaller LSPs represented in this study. One has recently become part of European group and has offices in Lisbon and Brazil. The other company is headquartered in Lisbon and it is also present in Angola and Brazil. Aside from translation and interpreting, they also have a strong presence in event organization. According to the managers, these organizations collaborate often with other partner companies on international projects and they have been part of consortia in European tenders.

Both companies reported having suffered the impact of the SARS-CoV-2, particularly in the areas of interpreting and event organization. The area of translation remained stable. However, LCMLX40 reported that the market was quick to adapt to new technologies in the field of remote interpreting and 2021, a year with some periods of full lockdown in Portugal, was the strongest year ever for the interpreting department.

Neither company reported difficulties in attracting talent from translator-training institutions, and both were actively engaged in internship programs with multiple universities. However, LCFLX40 did mention that she had had difficulty attracting talent from other areas:

Há depois aqueles jovens que olham só para as empresas que são 100% tecnológicas. Vou dar um exemplo. Se a nossa empresa colocar um anúncio de estágio e a Unbabel colocar um anúncio de estágio. Apesar de não serem concorrentes diretas e de as duas se inserirem no meio da indústria de tradução de modos completamente diferentes.... Temos uma indústria, temos a [nossa empresa] que se rege por ser uma empresa de algum modo tradicional, mas com que sempre andou na franja da tecnologia. Sempre acompanhou o desenvolvimento tecnológico e depois temos uma Unbabel que é 100% tecnológica, olhando muito menos para esta indústria tradicional da tradução. Os jovens olham e nem pensam duas vezes, preferem sempre, sem sombra de dúvida, um estágio na Unbabel. Mas se calhar, não são os jovens que vêm de cursos 100% de tradução e da área linguística, são jovens que vêm mais da área tecnológica e que nós também nos interessavam às vezes, e às vezes é difícil. Nestas faculdades, por exemplo, se nós formos ao Técnico, tentar buscar alguém, não é, para nos ajudar em programação ou algo assim, relacionado com neurolinguística ou o que seja. É difícil para a [nossa empresa] às vezes cativar esse tipo de jovens.

[35m 11s]

[And then you have those young people who only look at companies that are 100% tech. I'll give you an example. Let's say [our company] publishes an ad for an internship and Unbabel publishes an ad for an internship. Even though they are not direct competitors and both companies are part of the translation industry in completely different ways... We have an industry, we have [our company] with a somewhat traditional profile, but that has always been up-to-date with technology. It has always kept up with technological developments, and then we have Unbabel which is 100% tech, much less oriented to this traditional translation industry. Young people look at this and they do not think twice: no doubt they will prefer an internship at Unbabel. but perhaps these are not the young people coming from programs 100% in translation and languages, these are young people coming from the technological area and in which we would also occasionally be interested in, and sometimes it's hard. In these universities, for example, if we go to Técnico trying to attract talent, right, to help us with programming or something of the kind, with neurolinguistics or whatever. It is hard for [our company] to capture the attention of this kind of young person.]

Generational issues like difficulty in using translation technologies in general or outright refusal to work with machine translation, as reported by smaller companies, were also cited by all three participants from large LSPs.

4.4.4.1 Recruitment process in large LSPs

Both companies reported having a person in charge of human resources, who may also have other functions like career development or vendor management. They maintain some level of cooperation with universities regarding internships but are not restricted to Portuguese higher-education institutions.

LCFLX40 recently led a “shrink-to-grow” restructuring process at the company, and on that occasion the company let go of some in-house translators and now works mostly with freelance translators. In-house staff is made up mostly of project managers and support staff.

LCMLX40 then reported that his company seldom recruits freelance translators, as they prefer to establish partnerships with other companies for work that they cannot handle with the existing team:

Normalmente, nós recebemos muitos currículos, não é? Mas nós como somos uma organização que já existe desde 1998. Ou seja, já temos o nosso, as nossas equipas bem definidas e a nossa procura ativa está relacionadas com novos projetos. Normalmente em combinações linguísticas, mais exóticas que possam não existir aqui no mercado nacional. Nós trabalhamos muito em rede, né? Dependendo do tamanho das empresas de tradução, algumas preferem trabalhar com freelancers, com linguistas, normalmente as estruturas mais pequenas. Está familiarizado com o termo LSP, MLV?

JB: Sim, sim.

LCMLX40: Okay, pronto, então, enquanto LSP, nós trabalhamos... Quando temos uma necessidade de uma combinação linguística, que não que nós não temos internamente, aquilo que nós fazemos, fazemos parcerias com outras empresas, com outras empresas da nossa da nossa rede internacional, que também seja que tenham as mesmas certificações, ou seja, que sejam certificadas pela ISO 17100 ou de 18587 e que utilizem as mesmas tecnologias para podermos... Ou seja, nem sempre trabalhamos com os tradutores diretamente, mas estabelecemos parcerias

com outras empresas. Dentro do nosso, da nossa rede internacional. Quando contratamos tradutores freelancers, que é muito raro, como lhe disse, não é, mas passa por um processo de, é tudo sempre ao abrigo da 17100. Ou seja, o mínimo que nós solicitamos é o que está, o que é exigido na 17100.

[12m 09s]

[We normally receive many CVs, right? But since we are an organization that exists since 1998, i.e., we have our teams well-defined and our active search is related to new projects. Usually in language combinations that are more exotic and may not exist here in the local market. We rely on a network, right? Depending on the size of translation companies, some prefer to work with freelancers, with linguists, usually the smaller structures. Are you familiar with the term LSP [language service provider], MLV [multi language vendor]?

JB: Yes, yes.

LCMLX40: OK, so, as an LSP, we work... When we are in need of a language combination that we do not handle internally, we establish partnerships with other companies, with companies of our international network that have the same certifications, i.e., that are ISO 17100 or ISO 18587 certified and that use the same technologies, so that we can... I have to say that we don't always work with the translators directly, but we establish partnerships with other companies. Within our international network. When we hire freelance translators, which is very rare, as I have told you, right, the process always observes ISO 17100. I.e., the minimum requirement is what is requested in ISO 17100.]

Both companies are certified for ISO 17100:2015. This determines not only the recruitment procedure but also the minimum requirements in terms of qualifications and/or experience. In this sense, it is not different from the procedure for the small companies that are ISO certified.

4.4.4.1.1 The relevance of factors in recruitment

As for language competence, all participants in this group rated it as Very relevant. Experience is considered Relevant, also for fulfilling ISO requirements. However,

LCFLX40 noted that experience may be less of a factor when the company is looking specifically for someone that they wish to train from an early point in their career.

Both companies use tests for the initial evaluation of prospective translators. LCFLX40 provided some detail regarding the testing stage, which can be done online or at the company. The tests are timed. Once completed, they are evaluated by experienced reviewers and the translator is either accepted or rejected. During the first five projects for the company, the newly accepted translator works in close collaboration with an experienced reviewer. The translator must receive a positive evaluation for the first five projects to be vetted, and from that moment they no longer work under such close supervision.

Since both companies are ISO 17100 certified, academic qualifications for translators are deemed relevant but they are also a specific requirement of the standard.

4.4.4.1.2 Training

Participant LCMLX40 considered the initial training of translators at Portuguese universities to be adequate, although he mentioned that it could improve if greater synergies existed with translation companies.

LCFLX40 saw some gaps in technological competence, but above all she considered that students need more interaction with companies during their period at university to learn new skills and to gain a more accurate picture of what the professional life of a translator entails.

The former head of this same company, LCFLX70 offered a long-term perspective on translator training in Portugal:

Agora, o que posso dizer é que há um desfasamento muito grande ainda hoje, apesar de, em geral, como eu disse há pouco, os tradutores serem melhor formados hoje do que eram há 20 anos atrás. Há, continua a haver em Portugal, um grande desfasamento entre aquilo que, entre os *curricula* das universidades e as necessidades do mercado. Um desfasamento enorme. E eu penso que isso tem a ver com o facto de os professores, digamos, os docentes destes cursos não serem, na maioria dos casos, tradutores, pessoas experientes a este nível, compreende, e por isso não estão a par dos requisitos do mercado. E quem elabora os *curricula* não, não conhece as necessidades do mercado.

[39m 48s]

[Now, what I can say is that there is a very large gap still today, although, in general, as I said a few moments ago, translators are better trained today than they were 20 years ago. There is in Portugal, there still is a large gap between university curricula and market needs. A huge gap. And I think that this has to do with the fact that the teachers in these programs are not, for the most part, experienced people at this level. Do you understand? And for that reason they are unaware of market requirements. And those responsible for creating the curricula do not know the market needs.]

With respect to communication between companies and universities, LCFLX70 mentioned that such communication does not exist and added an account of the attempt at creating an entity to link translators, companies and universities:

Olhe, eu posso dizer que eu criei em Portugal, em 1994 a Associação Portuguesa de Empresas de Tradução. E, na altura, quem fazia parte, quem, quem dirigia a Associação Portuguesa de Tradutores era o Francisco Magalhães. Eu não sei se o João alguma vez ouviu falar, entretanto, morreu.

JB: Sim, sim.

LCFLX70: E juntamente com ele, que ele era uma pessoa aberta, decidimos criar em Portugal o Conselho Nacional de Tradução, e o Conselho Nacional de Tradução tinha como objetivo criar, digamos, uma colaboração estreita entre as universidades. Ou seja, os cursos, as faculdades com cursos de formação na área de tradução, a Associação Portuguesa de Tradutores e a APET, Associação Portuguesa de Empresas de Tradução para em conjunto, digamos, haver ali uma colaboração estreita para aproximar, digamos, todas estas vertentes. No sentido de melhorar e fomentar uma tradução profissional em Portugal. Falhei, falhámos neste projeto. O CNT foi criado, mas o que é certo é que deixou de funcionar. A componente das universidades nunca, digamos, funcionou. Sempre houve dificuldades ao nível das universidades entre si porque havia, entretanto... A ideia era criar um triângulo. Ou seja, cada grupo seria responsável pelo vértice do seu triângulo. Nas universidades havia as universidades privadas e as universidades públicas que conseguiram, digamos, criar apenas um único vértice, ou seja,

trabalhar em conjunto e tudo isso, depois acabou por adular o princípio. O que é certo é que eu deixei de acompanhar. Fui presidente desta associação, do CNT, do conselho e isso demorou quase 6 anos a criar. Conseguiu-se finalmente criar este conselho, mas depois, eu saí, digamos, porque eu acho que tem que haver renovação. E a coisa acabou por morrer. Não sei, neste momento o que é que se está a passar. Mas para responder à sua pergunta, tentou-se na altura trabalhar estreitamente com as universidades para haver esta proximidade, para que as universidades conseguissem saber o que é que o mercado precisava. E para haver, assim, a possibilidade de os curricula das universidades terem em conta as necessidades no mercado e haver este encontro. Isso não foi conseguido.

[41m 44s]

[Look, I can say that I created in Portugal, in 1994, the Portuguese Association of Translation Companies. And, at the time, the Portuguese Translators Association was headed by Francisco Magalhães. I don't know if you have heard of him; he has died since.

JB: Yes, yes.

LCFLX70: Together with him, who was an open-minded person, we decided to create in Portugal the National Council for Translation (CNT), and the National Council for Translation had as its goal to create, let's say, a close collaboration between universities, i.e., schools with programs in translator training, the Portuguese Translators Association and APET, the Portuguese Association of Translation Companies, so that together some form of close collaboration could exist to bring all these sides closer together, with the aim of improving and fostering professional translation in Portugal. I have failed, we have failed in this project. CNT was created, but it stopped working. The university component never really worked. There were always difficulties when it came to universities among themselves, because there was... The idea was to create a triangle, i.e., each group would be responsible for its vertex. Among universities, there were private and public universities that managed to create a single vertex, i.e., work together and all that somehow adulterated the principle. At some point, I no longer kept up with it. I was president of this association, CNT, the council, and it took almost six years to create. We finally managed to create this council but then I left, because I think there must be renovation. And it just died. I don't know what is happening with it

right now. But to answer your question, at the time we tried to work very closely to establish this proximity, so that universities would be able to know what was in demand in the market. And also to enable university curricula to take the market needs into consideration, to level this aspect. This was not achieved.]

As was the case with smaller language-service providers, communication and collaboration between companies and universities is essentially centered around internships. LCFLX40 very politely said that it “could be better” but she also admitted that both sides often lack the availability to explore possible avenues of collaboration. LCMLX40 shared a similar opinion and added that there is a tendency for communication to decrease over time, on the side of universities:

Eu lembro-me há muitos anos, quando nós recebíamos um aluno para fazer estágio, era muito comum o seu responsável, o responsável pelo estágio, se deslocar à empresa e fazer a introdução e explicar o porquê do estágio, responsabilizar o aluno, responsabilizar a empresa, não é, pelo aluno que vai receber, havia toda, digamos, uma... Havia uma relação inicial e real. E hoje em dia deixou de... E não estou a falar desde a pandemia, né? Hoje em dia eu, eu quase não conheço os responsáveis dos estágios, ou seja, há pouca relação entre o... Falta-me agora o termo, sim, o responsável na faculdade determinado aluno do estágio. Acho que há pouca relação, a esse nível, mas nós tentamos promover, digamos, a relação com, enfim, com as entidades académicas que nos procuram, não é?

[23m 33s]

[I remember that many years ago, when we received a student for internship, it was very common for the person in charge, the person in charge of the internship, to come to the company and make an introduction, explain the goals of the internship, make the student accountable, make the company accountable for the student that it is about to receive, there was, let’s say, a... There was an initial and real relationship. And today it no longer... I don’t mean since the pandemic, right? Nowadays I hardly know the people in charge for the internships, which means that there is very little relationship with the... I don’t remember the right term, yes, the person in charge for a given student of the internship. I think there is a very limited

relationship at that level, but we try to promote the relationship with academic institutions that reach out to us, right?]

There was no mention of any opportunities for collaboration outside of internships.

Both company managers reported difficulties in finding project managers on the market, and both would welcome more training in this specific area.

4.4.4.1.3 The impact of new technologies

Both the larger LSPs reported a significant impact of new technologies, especially machine translation. LCMLX40 also reported that new remote interpreting technologies had become instrumental during the pandemic.

LCFLX70 explained the technological breakthrough that enabled the significant increase in the use of MT. She actually quantified its use at the company:

Desde que o sistema neural foi desenvolvido, digamos, deu um salto em frente muito grande, que foi há cerca de 5 anos, mais ou menos 5 e 6 anos, a [nossa empresa] neste momento, eu acho que deve ser a empresa portuguesa que mais tradução automática faz. Nós neste momento fazemos já cerca de 50% do nosso trabalho... É tradução automática. E apostámos imenso nesta área e continuamos a apostar. Nós estamos na linha de frente em tudo, tradução, de inteligência artificial, etc., porque tem que ser.

[13m 17s]

[Since the neural system was developed, let's put it like this, there was a great leap forward, which occurred about five years ago, more or less five or six years ago. [Our company] right now, I think it must be the Portuguese company that translates the most using automatic translation. Right now about 50% of our work... it is automatic translation. We have invested a lot in this area and we continue to invest. We are in the frontline of everything, translation, artificial intelligence, etc., because we have to.]

She then explained the impact that this had had on the role of the translator:

Hoje em dia, é muito interessante verificar que, num processo de tradução, a tradução propriamente dita, imagine num processo, um encadeamento de A a Z, a tradução propriamente dita tem lugar ali no apenas num determinado espaço, numa determinada fase. Tudo o resto são tarefas que não têm a ver com a tradução propriamente dita. Têm a ver, porque têm a ver com o produto em si. Mas a tradução, o envolvimento do tradutor está limitado a um determinado ponto, a uma determinada fase. Ou seja, o tradutor pode também assumir as outras fases, mas já não se pode falar que as tarefas que ele está a assumir têm a ver diretamente com técnicas de tradução.

[14m 14s]

[Nowadays, it is very interesting to notice that, in a translation process, translation proper – think of a process, a chain from A to Z – translation proper occurs only in a limited space, in a specific phase. Everything else comprises tasks that are not related to translation. They are related in the sense that they are related to the product. But translation, the involvement of the translator is limited to a given point, a given phase. I.e., the translator may also take over the other phases, but it can't be said that those tasks are directly related translation techniques.]

LCFLX70 also stressed that the client is always knowledgeable about the use of machine translation in their projects:

[...]tradução automática, como se diz hoje em dia, é um *must*, já não é presente, é passado. Isso já faz parte do passado. Nós cá em Portugal é que estamos um bocadinho, sempre um bocadinho em desfasamento, de atraso daquilo que se passa a nível global. Mas, como disse, é passado. Que é que acontece? Tem três tipos de tradução automática. Tem a tradução automática que não tem qualquer envolvimento por parte do tradutor, e isso acontece quando são grandes volumes e o cliente quer apenas saber mais ou menos do que é que trata. Nós fazemos muito pouco esse tipo de tradução automática, praticamente contam-se pelos dedos as ocasiões em que nós recorremos a ele, porque isso é uma decisão que o cliente toma e depois tem dois tipos. Tem mais dois tipos de tradução automática: tradução automática um e tradução automática dois. Tradução automática um é aquela que é feita... A tradução é passada pelo programa, depois há uma pós-edição feita pelo

tradutor. A tradução automática dois é quando há dois editores. E aí, praticamente, não há diferença entre uma tradução, digamos, feita por humanos e uma tradução feita com estes dois níveis de controlo de qualidade. Está a ver? Sempre que o cliente deseja, é o cliente que decide. Sempre que deseja, deseja, de facto, uma qualidade a 100%, é necessário introduzir um segundo pós-editor.

JB: Exato, exato.

LCFLX70: Tudo isto é feito em colaboração com o cliente. A tradução automática não é algo que é decidido apenas pela empresa, é feita em conjunto com o cliente. É quando o cliente de facto está interessado em reduzir custos e está interessado em rapidez, porque isto permite uma rapidez muito superior, àquela que é feita quando... Que existe quando é feita por humanos.

[15m 08s]

[[...] machine translation, as we say nowadays, is a must, it is not the present, it is the past. It is part of the past. In Portugal we are somewhat, we are always a little out of sync, late to what is happening globally. But, as I told you, that's the past. Here's how it works: you have three types of machine translation. You have machine translation without any involvement from the translator, and that happens when we are dealing with very large volumes and the client only wants to get a gist of the content. That kind of automatic translation is something that we do not do often. I can count with my fingers the number of occasions where we used this kind of machine translation, because this is a decision that the client makes. Then you have two other types of machine translation: machine translation one and machine translation two. Machine translation one is performed... The translation is run through the program and then there is one post-editing performed by the translator. Machine translation two is when two editors are used. And in that case, there is almost no difference between a translation performed by humans and a translation with these two quality control levels. You see? Whenever the client wants, it's the client's decision. Whenever the client really wants 100% quality, a second post-editor is needed.

JB: Right, right.

LCFLX70: All this is done in collaboration with the client. Machine translation is not something that the company decides on its own; it is done with the client. And when the client is really interested in reducing costs and in speed – because this

enables much higher speed than is achieved... That you get when it is done by humans.]

LCFLX40 also stressed that MT has advantages for translators:

Quando eu ouço um tradutor – e acontece muitas vezes – dizer-me “eu não quero TA, isso não traz benefício nenhum”. Há maneira de comprovar hoje em dia, há métricas que permitem comprovar que a tradução automática, ainda que não tenha um nível de qualidade, um output de qualidade exímio ou excelente, tem um nível bastante aceitável e que poupa tempo ao tradutor. Poupa tempo. Poupar tempo a um tradutor significa que ele pode receber mais trabalho, e vai poupar tempo a fazer o trabalho que está a fazer comigo e eu posso dar-lhe dar mais trabalho a seguir. Isto é benéfico para todos, acho eu...

[51m 43s]

[When I hear a translator – and it happens very often – telling me that “I don't want MT, that has no benefit”. There are ways to demonstrate, there are metrics that allow us to demonstrate that machine translation, even if it does not have a level of quality, a quality output that is outstanding or excellent, it has a quite acceptable level and it saves time to translators. It saves time. Saving time means that the translator can receive more work. By saving time doing what they are doing for me now, I can give them more work afterwards. This is beneficial for all, I think ...]

She also reported that MT would potentially have an impact on how professionals are paid:

[H]á métricas que nos dizem que a tradução automática deve ser paga entre 65 a 70% da tradução normal, porque há um ganho de X. Hoje em dia já se conseguem fazer esses cálculos todos e aquilo que eu acho que é benéfico, que é uma das coisas que temos neste momento, a estudar aqui internamente. É o pagamento passar para outro tipo de formato. Não haver um pagamento à palavra, haver um pagamento à hora. E o tradutor perceber, ou o pós-editor nesta realidade, perceber que, de facto, o tempo que despende é inferior e que está a ganhar por esse tempo que despendeu.

[53m 12s]

[There are metrics that tell us that machine translation should be paid at a rate of 65 to 70% of normal translation, because there is a gain of X. It is now possible to do all these calculations and, as I see it, one of the advantages is something that we are considering internally. It's a different format of payment. Instead of paying by the word, we would pay an hourly rate. And the translator, or post-editor in this case, realizing that in fact they spend less time and they are being paid for the time they spend.]

In this new paradigm, client education was also reported by LCFLX40 to be an important task, and in particular that Google Translate is not the gold standard:

É preciso explicar ao cliente e o cliente estar ciente que os que os motores de tradução com que nós trabalhamos são 2 ou 3 furos acima disso, são tradutores que são tradutores automáticos, são motores de tradução automática que são trabalhados, que exigem trabalhar de terminologia, é um ponto fundamental de que não falámos. Acho que ainda não tenha dito a palavra terminologia nesta entrevista inteira. Mas é um ponto fundamental. Também é algo que é preciso - e a [nossa empresa] sempre teve um standard muito, muito, um selo de qualidade muito elevado, relativamente ao tratamento de terminologia. Mesmo numa tradução automática, o trabalhar motores com a terminologia adequada promove um output de qualidade muito superior e isto tem que ser muito... É um trabalho interno. Lá está. Que nem todas as empresas conseguem.

[59m 03s]

[You have to explain to the client, and the client must be aware that the translation engines that we work with are two or three notches above that, these are automatic translators, machine translation engines that are tuned, which require terminology work – this is a fundamental aspect that we haven't spoken about. I think I hadn't mentioned the word terminology throughout the interview. But it is something fundamental. It is something that is necessary – and [our company] has always had a very high standard of quality when it comes to terminology management. Even in automatic translation, tuning engines with the right terminology leads to an

output of much higher quality and this must be... It is something that we do internally. There, it's something that not all companies are able to do.]

Machine translation is not seen as an immediate driver of unemployment, but some remarks regarding the investments that are necessary to set up, maintain and update these systems suggest that undercapitalized organizations may have trouble keeping up with MT.

For the final item in this section of the interview, participants were asked to rate the relevance of technological competence in the recruitment process. All three participants representing large LSPs considered Technological competence to be Relevant or Very relevant. LCFLX40 mentioned that this competence could vary in relevance depending on the type of project, since there are still projects that do not require advanced technical skills. LCMLX40 reported that he did not see this competence as very relevant, *a priori*, because his company provided training internally for these technologies.

4.4.4.1.4 Perspectives for the future

All three participants reported feeling optimistic about the future. Globalization was seen as an important driver of translation and thus of growth for these companies. Among the challenges for the future of the industry, they cited the financial burden of investing in technology. Smaller companies will be faced with the choice of either specializing in niche markets and remaining small or joining forces to grow and remaining competitive.

LCFLX40 specifically mentioned versatility as a key soft skill to survive in the current and future environment:

Há uma competência, que é uma *soft skill*, que é versatilidade. Eu acho que as pessoas têm que perceber que isto é um mercado, é uma indústria que sofreu grandes alterações nos últimos 10 anos e vai continuar a sofrer. E se não formos versáteis, não tivemos capacidade de adaptação. Não, não, não vamos ter lugar, não vamos ter lugar nem nós, enquanto empresa, nem tradutores, nem pós-editores. Portanto, tem que haver esta capacidade de mutação e de ser capaz de acompanhar estas evoluções.

[55m 35s]

[There is a competence, a soft skill, which is versatility. I think people must realize that this is a market, it is an industry that has undergone very significant changes over the past 10 years and this process will continue. And if we are not versatile, if we do not have adaptability.... we will not have a place, there will not be a place for us as company, as translators, or post-editors. So, you have to have this ability to mutate and be able to keep up with these evolutions.]

Regarding changes in skills and roles, all participants mentioned the shift from human translation to machine translation + post-editing as a trend that will accelerate. But LCFLX40 did not see translators disappearing anytime soon, although in her opinion specialization would be a key feature for success:

A importância trabalhar com especialistas também vai sendo cada vez maior. Os pós-editores ganham destaque, mas têm que ser especialistas nas suas áreas. Assim como os tradutores, para manterem a sua função, ou seja, têm que aportar uma competência técnica especializada ao trabalho, que acrescenta valor e que faz a diferença. Não vão desaparecer. Não sou daquelas pessoas que acham que vão ser todos substituídos por máquinas, de maneira nenhuma.

[1h 00m 53s]

[The importance of working with specialists is also growing. Post-editors are increasingly important, but they need to be specialists in their areas. The same goes for translators, if they want to keep their job, i.e., they must bring a specialized technical competence to their work, which adds value and makes a difference. They are not going to disappear. I'm not one of those persons that think that everyone will be replaced by machines, no way.]

According to LCMLX40, indirectly stressing the importance of adaptability, linguists currently performing translation tasks are likely to shift to review and quality assurance positions as MT improves. The hesitations in his speech are particularly noticeable in this segment, as he alluded to an inconvenient truth:

Ou seja, tudo que é machine translation fica cada vez mais apurada. Penso que o papel do linguista passará para uma fase seguinte de pós-edição e controlo de qualidade.

JB: E que competências, ou que funções dentro do setor da tradução, é que acha que vão perder importância?

LCMLX40: O tradutor, não é? A função... O tradutor não perde importância e ele muda, é de... Ou seja, o tradutor, terá sempre um papel importante, desde que ele consiga adaptar-se a novas funções, né? Ou seja, a tradução, a tradução propriamente dita vai perder, com a evolução deixa de ser necessária, ele passará a ser um revisor, né? O revisor, um pós-editor que, que penso que é o papel mais importante.

[41m 11s]

[I mean to say that machine translation is becoming more and more sophisticated. I think that the role of the linguists will shift to a subsequent stage: post-editing and quality control.

JB: And what competences, or functions within the translation industry, do you think will become less important?

LCMLX40: The translator, right? The function... Translators do not lose importance, they change from... I.e., the translator will always have an important role, as long as they can adapt to new functions, right? I.e., translation proper will lose, with evolution, it will no longer be necessary, and they will become a reviewer, right? The reviewer, a post-editor, which in my opinion is the most important role.]

For these larger companies, project management is a key area and talent is in very short supply. LCFLX40 focused on this issue:

A nível de funções, é como eu disse há pouco, eu acho que a área de gestão de projeto vai sempre existir e cada vez mais com competências diferentes; como também já mencionei, acho que temos que olhar um bocadinho mais também para as competências tecnológicas, para especialização numa área de gestão de projeto para a área de tradução. Há bocado fez uma comparação com os accounts e etc., se me perguntar quando eu às vezes vou ao mercado à procura de um gestor de

projetos e peço alguém com área... Com experiência na área de tradução, não é fácil, não é fácil e não, não há assim tantos. Bem, então, em Portugal há poucos.

[56m 07s]

[As far as functions are concerned, like I have said a short while ago, I think that the area of project management will always exist and increasingly with different competences; as I have already mentioned as well, I think we need to pay a bit more attention to technological competences, to specialization in the area of project management for translation. A few minutes ago, you made a comparison with account managers, etc. If you ask me, when I sometimes go to the market looking for a project manager and if I request someone from the area... with experience in the field of translation, it's not easy, it's not easy, and there aren't that many. In Portugal especially, there are only a few.]

LCMLX40 also alluded to the shortage of project managers, which was aggravated by globalization. With current remote working abilities, large international companies can easily poach the market for talent:

[...] gestão de projetos é determinante. Ela é uma grande, é uma grande, há uma grande procura, uma grande necessidade. [...] As associações, nomeadamente a associação do Reino Unido, também à qual nós pertencemos, está a promover a formação, a fazer formação. Isto é um projeto precisamente para conseguir capacitar as suas equipas, porque há uma necessidade de gerir projetos, projetos de todo o tipo de formato: texto, áudio, vídeo, né? Ou seja, há uma lacuna que o, que o mercado, que o mercado tem, vai haver uma grande... A começar com esta questão do teletrabalho, né? As grandes organizações facilmente conseguem, internacionais, conseguem vir buscar profissionais a mercados mais, mais pobres como o nosso, buscar profissionais, qualificados. E eu diria que, depois, tudo o que é pós-edição. A profissão de pós-editor é absolutamente... Penso que será o futuro próximo, né?

[38m 41s]

[[...] project management is key. There is a big, big demand, a great need. The associations, namely the United Kingdom association, of which we are also

members, is designing and delivering training. This is a project specifically to provide teams with skills, because there is a need to manage projects of all kinds of formats: text, audio, video, right? I.e., there is a gap that the market, the market has, there will be a big... Starting with the remote working issue, right? Large international organizations can find professionals in poorer markets like ours, qualified professionals. And then, I'd say all things related to post-editing. The profession of post-editor is absolutely... I think it is the near-term future, right?]

4.4.5 Global LSP

The final interview in this section involved the regional vendor manager for the EMEA (Europe, Middle East and Africa) region at one of the largest international language vendors. This interview happened at a time when this company was expanding its presence in Portugal with the creation of a major hub in Lisbon to host vendor managers and operations staff. This happened, in part, due to Brexit complications related with residence permits.

A regional vendor manager is responsible for developing a team of vendor managers. Vendor managers are responsible for managing a pool of service providers, including translation. They are also in charge of recruiting talent.

The company recently experienced significant growth, mostly through the acquisition of smaller competitors.

4.4.5.1 Recruitment process in global LSP

Translators and other professionals, here termed vendors, may spontaneously apply to work for this company via their website. Vendor managers also scout sites like ProZ for translators, for talent, but even in this case prospective translators are redirected to the site to submit their application.

This company is fully certified to the ISO 9001, ISO 17100 and ISO 18587 standards. ISO 17100, in particular, lays out specific requirements in terms of the academic qualifications and experience that translators must meet to be able to work for a certified company. At least four other LSPs in this study are also ISO 17100 certified, and this explains the similarities across the recruitment process.

Once the application has been submitted, all documents and references are reviewed. GCMLX50 explained that applicants are required to upload a certified copy of their academic diploma. The following step in the process is a test in one or more areas

of specialization selected by the applicant. If the person is applying for different roles (e.g. translator, reviewer, post-editor), they need to take a test for each individual role to attest the abilities. All tests are done online, using the company platform.

The anonymized tests are evaluated by a reviewer or a more experienced translator using an online tool. An algorithm calculates the final score, but the reviewer is able to override the algorithmic result if they deem the applicant to be worthy of consideration under specific circumstances (a “threshold pass”). Such cases always require the approval of a senior vendor manager.

Once the testing phase is completed, the applicant is added to the company’s database but their profile will be restricted. Before actually receiving any projects from the company, every new vendor must take online courses on a platform owned by the company. The courses are free and mandatory, ranging from business practices to specific tools used internally. At the end of each course, there is a test. Passing the test is mandatory for the profile to become unrestricted and visible to project managers. The set of courses that each applicant is required to take varies according to the position that the person is applying for (translator, reviewer, post-editor, etc.). The time spent on the courses and the tests is not paid for, unless the training is a specific requirement for using proprietary client tools. The company also makes available a large selection of optional courses for self-learning.

The process is lengthy and costly, both for the applicant and for the company, and GCMLX50 highlighted that the company has no interest in adding people to the database just for the sake of building numbers:

Atenção que, por vezes acontece, e a empresa tenta minimizar isso o mais possível, não só porque a empresa tem noção que o processo de recrutamento de raiz é muito moroso não só para os tradutores, mas também para, para, para a própria empresa, por causa da quantidade de processos, morosidade, etc. E, portanto, a empresa tenta é fazer com que o tempo que as pessoas e a própria empresa gastou nisso seja rentabilizado. Ou seja, não é do interesse da empresa, objetivamente falando, estar a contratar à maluca estar a registar pessoas à maluca e depois nunca pega nelas. O que não quer dizer que isso não aconteça. Porquê? Porque muitas vezes há uma resistência – mistério – enfim, um dado conhecido e até compreensível até no estudo da natureza humana. Alguma resistência da parte das equipas de produção em experimentar recursos diferentes. A empresa tenta sempre garantir que os ovos

não estão todos no mesmo saco, ou seja, que os projetos não dependem só de uma ou duas pessoas. Isso exige alguma monitorização, que é também da responsabilidade dos *vendor managers*, garantir e alertar as equipas de produção do sentido de “Vocês estão distribuir mal o trabalho. Isso tem que ser mais bem distribuído. Atenção aos ovos todos no mesmo saco. Porque é que não usam mais essa pessoa e não sei quê?”

[27m 02s]

[I draw your attention to the fact that this sometimes happens and the company tries to minimize this as much as possible, because the company is aware that the recruitment process from the ground is very lengthy, not only for translators but also for the company due to the number of internal processes involved, and how slow they are, etc. So the company tries to maximize the gains from the time that people and the company spend. I mean to say that it is not in the company's interest, objectively speaking, to hire people like crazy or to add people to the company database like crazy and then never use them. Notwithstanding, it's something that may happen. Why? Because often there is a resistance – quite the mystery – and this is a well-known fact and even understandable in the light of human nature. There is some resistance from the production teams to trying out different resources. The company is always trying to make sure that the eggs are not all in the same basket, i.e., that the projects are not dependent on one or two people. This requires some monitoring, which is also a responsibility of vendor managers, to make sure and alert the production teams that “You are allocating work incorrectly. You need to improve the allocation. Beware of putting all the eggs in the same basket. Why don't you use this person a bit more, and whatever not?”.]

To capitalize on the recruitment process and to retain talent, the company has the goal that all recently admitted vendors be working on projects within two weeks of approval:

É que qualquer pessoa recém-admitida como fornecedor tenha, ao fim de duas semanas depois da conclusão deste processo todo, tenha já trabalho atribuído. Para evitar exatamente o que acontece que é a pessoa investiu esse tempo todo e a empresa também, e depois não acontece nada e a pessoa desinteressa-se. E um dia,

quando é contactada: “olha, entretanto, estou a fazer outra coisa, portanto, adeus”. Acontece. Não acontece muito, mas acontece. E para evitar isso, é um dos objetivos do meu grupo de *vendor managers*, não especificamente de EMEA, mas globalmente falando, de garantir que as pessoas que são recrutadas, que ao fim de duas semanas, que já tenham algum trabalho atribuído. Isso exige acompanhamento, obviamente, pós admissão, digamos assim.

[28m 52s]

[It's that any person recently admitted as vendor has some work assigned to them within two weeks of completing this whole process. To avoid that the person invested all that time and so did the company, and then nothing happens – i.e., people lose interest. And one day, when you reach out to them, they tell us that they have started doing something else and it's goodbye. It happens. It does not happen a lot, but it happens. To avoid this, it's one of the goals of my vendor manager group, not specifically for EMEA, but globally, to make sure that the people that are hired are assigned work within two weeks of recruiting. This obviously requires some monitoring, post-admission, let's put it like this.]

This is the only participant in the study who put forward a specific deadline for vendors to begin working on live, paid projects. It is unclear whether freelance vendors are made aware of this schedule during the process. No information on this specific topic was found on the public pages of the company website.

4.4.5.1.1 The relevance of factors in recruitment

In line with most participants, GCMLX50 rated language competence as Very relevant. Experience was deemed Relevant. Tests were also considered Relevant, although candidates could be rejected based on the test results. I would here note that the participant hesitated between Relevant and Very relevant, but the possibility of overriding the results made him go for the former. Academic qualifications are considered inherently relevant due to the ISO certification, which establishes clear requirements for the company.

4.4.5.1.2 Training

When asked whether the university training of translators in Portugal was adequate, participant GCMLX50 loudly and promptly answered “No.” Although he admitted not being aware of the current situation at universities, he based his opinion on the quality of applicants:

Não sei como é que as coisas estão neste momento. Eu acho que estão melhores no sentido de que as universidades estão mais conscientes das competências de que as pessoas realmente precisam para trabalhar como profissionais de tradução no mercado. Não estão só em casa, com um dicionário ao lado e uns livros. Portanto, na minha opinião, continua fraca. Eu vejo isso pelos candidatos que me chegam e continua... Está melhor, mas continua fraca. Porquê? Porque, por um lado, as pessoas não são expostas àquilo que é realmente o trabalho de tradução em termos de exigência de domínio da informática, por exemplo. Domínio de ferramentas, há pessoas que nos chegam aos testes com desconhecimento básico de coisas de informática básicas, digamos assim. E isso por um lado, portanto a parte técnica propriamente dita e depois o que é que significa a traduzir? E isto é em parte, culpa das próprias empresas, mas traduzir não significa necessariamente verter palavras. São os conteúdos. Aquilo que eu, quando eu fiz formação e quando eu estive na universidade se chamava equivalência dinâmica, ou seja, equivalência de intenção. É a intenção comunicativa que tem que ser retida na língua de chegada e não necessariamente as palavras.

[32m 06s]

[I do not know how things are right now. I believe that things are better in the sense that universities are more aware of the competences that people actually need to work as translation professionals in the market. They aren't sitting home alone, with a dictionary and a few books on the side. So, in my opinion, [training] is still weak. I see that in the applicants that I get, it continues to be... It is better now, but it is still weak. Why? On the one hand, people are not exposed to what translation work really is in terms of the proficiency required in the use of computers, for example. Command of tools... There are people taking our tests that don't even know basic aspects of electronic tools, let's put it like this. This, on the one hand,

the technical side, and then, on the other hand, what it means to translate. Companies are partly to blame for this, but translating doesn't necessarily mean words. It's about content. It's what was called dynamic equivalence, i.e., equivalence of intention, when I was studying at university. It's the communicative intention that must be captured in the target language and not necessarily the words.]

However, according to this participant, the main problem of training in Portugal lies in the lack of opportunities for translators to specialize by acquiring specific technical competence:

A tradução nas diversas áreas, desde maquinaria até engenharia civil, engenharia de combustíveis, etc. Não sei o quê. Há uma série de áreas muito específicas com terminologia, fraseamento, digamos assim, muito específicos, e as pessoas não recebem a formação. Nenhuma. É o que eu vejo é nesse campo e isso limita-as extraordinariamente não só como tradutores, mas como revisores muitas vezes.

[36m 07s]

[Translation in different areas, from machinery to civil engineering or fuel engineering, etc. There are several areas that are very specific, they have specific terminology and phrasing, let's put it like this, and people are not trained for this. Zero. It's what I see in that particular area, and that is an extraordinary limitation, not only for them as translators but also as reviewers on many occasions.]

The lack of specialized dictionaries for European Portuguese was also cited as a significant issue.

In Portugal, this company currently has no internship programs, although such programs exist in other parts of the world. GCMLX50 added that these internships are not limited to translators, and they mostly accept candidates for the whole range of functions available at the company (sales, vendor management, assistants, etc.). With the creation of the new hub in Lisbon, the company will seek opportunities to collaborate with local universities.

When asked about collaboration between the company and universities outside the realm of internships, GCMLX50 reported that it is not a common practice, but some local initiatives exist mostly at the level of training, not research.

4.4.5.1.3 The Impact of new technologies

Machine translation has had a relatively limited impact on this company. GCMLX50 reported that only a limited number of accounts used machine translation and only at the highest-quality tier, i.e. on a par with human translation. However, he added that the situation is changing at the request of clients, and an increasing weight of MT is expected.

Participant GCMLX50 rated technological competence as Relevant, but he noted that for some specific accounts this kind of competence may absolutely crucial, whereas for other accounts it may not be as relevant.

4.4.5.1.4 Perspectives for the future

GCMLX50 cited exotic markets or languages as strong sources of future growth for the company. In Europe, the Irish language was the clear standout in terms of perspectives, in particular due to the new status of the language in the European Union. Translation into African languages, outside of South Africa, were expected to grow significant in volume and complexity. Biomedical sciences were mentioned as an area of strong growth in sub-Saharan Africa. Mesoamerican languages are also set for growth, especially in the legal area due to immigration trends. Finally, GCMLX50 also reported that machine translation is ripe for growth, including for these exotic languages.

More transitorily, the Ukrainian war was reported as a major factor of distress in the translation market, causing sudden spikes in demand in previously very low volume language combinations like Polish and Ukrainian. This was aggravated by the fact that many of these translations need to be sworn, and the pool of available company-approved translators with proper qualifications was very limited. Moreover, many of these translators were also affected by displacement caused by the war and difficulties in conducting business due to sanctions.

Among the roles with the greatest potential for growth in the coming years, GCMLX50 highlighted sales staff, especially in the above-mentioned “exotic” language markets, which need to be developed from the ground. For these languages, he also

expects significant demand for translators, reviewers, interpreters and quality-assurance specialists. MT was also mentioned as one of the major factors for the future:

A introdução em grande força da tradução automática. Eu sei que há tradutores que se recusam a trabalhar com tradução automática, mas é uma decisão condenada a prazo, e eu diria até a curto prazo.

[1h 03m 54s]

[The introduction, to a massive extent, of machine translation. I know there are translators that refuse to work with machine translation, but this decision on their side is doomed to failure in time; I would actually say in the short-term.]

In the face of these perspectives, I invited GCMLX50 to say what competences should be introduced or strengthened in translator training. He first addressed the need to improve the command of the target language, especially in the wake of machine translation. According to him, clients will demand the use of MT but they will not lower their quality standards. To provide this kind of service, post-editors will require very fine language skills to make all the necessary changes to machine translation output:

Na minha experiência, aquilo que eu vejo das queixas dos clientes, etc. Os problemas que há em projetos onde a tradução automática é usada é que não há necessariamente um erro gramatical, ou não sei o quê, mas de facto, aquilo está deselegante, está deselegante, está deselegante porque a pessoa não soube, não foi capaz de dar a volta, de adaptar o output de *machine translation*. É perfeitamente possível que agora, com estes *engines neuro*, não sei o quê, *neural networks*, etc., que o output seja cada vez melhor. Porque vai aprendendo com as correções que são feitas. Mas para isso as correções têm que ser feitas.

[01h 06m 40s]

[In my experience, from what I see in client complaints, etc., the problems that occur in projects where machine translation is used is that there's not necessarily a grammar mistake, or something of the kind, but indeed that sounds inelegant, it is inelegant, it is inelegant because that person couldn't, wasn't able to transform, to adapt the machine translation output. It is quite possible that now, with these neuro

engines, neural networks, etc., the output will get better. Because it learns from the corrections that are made, but for that to happen corrections need to be made.]

His suggestion is that finer writing skills will be required, akin to those traditionally required for literary translation.

In the final question of the interview, GCMLX50 was asked whether he felt optimistic or pessimistic about the future. Although he shared a positive view for the future, he saw good times ahead for translation but bad times for translators, with rising requirements and falling rates:

Eu estou otimista no sentido de que as pessoas não vão começar todas a falar esperanto e a tradução deixa de ser necessária. E portanto, eu acho que o mercado vai continuar a existir. O que eu acho é que isto é um desafio para vendas, mas também para os tradutores, que depois é quem tem que lidar com isto: é que a ideia de *machine translation* veio criar uma expectativa de redução em termos de custos, que depois essa redução é transferida na realidade para os tradutores que depois têm que trabalhar a dobrar. Portanto, há aqui um problema. Tradutores sindicalizem-se, porque se adivinham uns tempos muito complicados no sentido de uma grande redução dos preços para o tradutor, mas não acompanhada de uma redução dos requisitos, os requisitos vão aumentar. Tecnológicos, de qualidade, etc., e os preços vão baixar.

[1h 08m 46s]

[I am optimistic in the sense that people will not all start talking Esperanto and translation will cease to be necessary. Therefore, I think the market will continue to exist. I also think this is a challenge for sales but also for translators who eventually have to cope with the problem: the idea of machine translation created an expectation of reduced costs, but that reduction ends up being passed on to translators who must work twice as hard. So, there is a problem here. Translators unionize because there are some very complicated times ahead in the sense of a significant reduction of prices paid to translators that is not matched with a reduction of requirements. These will actually increase – technological, quality requirements, etc. – and prices will get lower.]

Chapter 5. Discussion

Having presented the results, I now move to the discussion of the findings. I begin by testing the hypotheses, then I revisit the research questions and I review the findings across the main areas of the study: signals, assessment of prospective translators, industry, and training.

5.1 Hypothesis testing

In this section I will review the hypotheses in the light of the research results.

5.1.1 Hypothesis 1 (H1)

My first hypothesis states that: “Employers tend to test prospective translators in areas where the signals are most ineffective.” This hypothesis is partially confirmed.

Signal effectiveness is positively correlated with the ability of the employer to make predictions about the productive capability of potential employees. More effective signals enable more accurate predictions. Tests may then be used where the signal is deemed ineffective or untrustworthy.

The results presented in sections 4.3.2.2 and 4.3.2.3 show that testing occurs mainly in the linguistic and translation-production categories, which are the most complex and expensive to verify. Technological competence is the next most tested.

However, the data have also shown that testing correlates positively with the relevance score of the competence. The linguistic and translation-production competences are the most critical for the output of a translation company. The differences in testing observed between the recruitment procedures for in-house translators and freelance translators also indicate that testing is tailored to the specific role, and that testing shifts partially in tandem with the key competences for each role.

Table 27 and Table 28 present the relevance of signals and the frequency of testing for prospective in-house translators and freelance translators.

Table 27. Competence relevance and testing (in-house)

Competence	Relevance score	Competence	% testing
Target language	4.89	Target language	100.00%
Source language	4.67	Source language	88.89%
Production of translation	4.67	Production of translation	88.89%
Intercultural	4.33	Technological	77.78%
Information mining	4.22	Thematic	66.67%
Technological	4.22	Information mining	55.56%
Thematic	4.11	Interpersonal	55.56%
Interpersonal	4.00	Intercultural	33.33%

For prospective in-house translators, there is a perfect match between the three most-relevant and most-tested competences. Signals for these three competences are typically a diploma or certification. The high coverage of testing in these competences suggests that employers mostly do not trust the signals transmitted by prospective translators related to these competences. Therefore, companies verify them by means of a test.

Since professional certification is essentially non-existent in Portugal, it is no surprise that it is ineffective as a signal. Higher-education diplomas, on the other hand, are highly regulated. Tertiary education institutions have to apply for accreditation of newly created programs and periodic audits ensure that the programs remain on track. Yet, as a signal, diplomas seem to be strikingly ineffective. This is further corroborated by the answers collected during the interviews regarding the adequacy of the initial training of translators, where several shortcomings and skills gaps were highlighted. Trust in the quality of the initial training, as perceived by the companies, thus becomes a major factor in the efficacy of the signal, at least to the extent that trust correlates positively with efficacy.

Table 28. Competence relevance and testing (freelancer)

Competence	Relevance score	Competence	% testing
Target language	4.93	Target language	92.86%
Source language	4.71	Source language	85.71%
Production of translation	4.71	Technological	78.57%
Information mining	4.64	Thematic	71.43%
Thematic	4.50	Production of translation	71.43%
Technological	4.36	Information mining	64.29%
Intercultural	4.21	Intercultural	42.86%
Interpersonal	3.86	Interpersonal	28.57%

For prospective freelance translators, the picture is very similar. The main difference concerns the coverage of testing in translation-production competence. This does not affect my overall finding.

5.1.2 Hypothesis 2 (H2)

My second hypothesis states that: “Technological competence is the least tested in freelance translator recruitment procedures.” This hypothesis is rejected.

If the hypothesis were to hold, I would expect to find Technological competence at the bottom of the testing coverage. Basic, working technological competence does not take long to learn, unlike, for example, language competence. Moreover, technological competence is easy and inexpensive to verify. Many tasks using these tools can be verified automatically and are highly programmable, which means that most tool-related problems can be captured and corrected automatically. Considering that these tools are updated frequently, I would also expect it to be a frequent topic of training, where technological laggards have ample opportunities to be brought up to speed. During the interviews, several participants also mentioned the easy transfer of technological competences across tools and the ample availability of training, either in-house or from tool vendors.

The data in Table 27 and Table 28 clearly show that Technological competence is among the most tested, although it ranks in the bottom half of competences in terms of relevance, both for prospective in-house translators and prospective freelance translators. It is also one of the competences for which companies reported providing the most on-the-job training to translators. This is an indication of a frequently missing competence and one that requires frequent updating.

5.2 Signals in ads

Signaling efficacy is partially determined by the content of job advertisements, i.e. ads that are less specific about the exact signals that the employers are looking for are prone to generating noise.

Most of the job advertisements in the press or specialized job search websites are not published by translation companies. In the corpus of advertisements that I collected, most ads were published by companies specialized in human resources, acting on behalf of end clients. All the ads found in the press or specialized job search websites were for

in-house positions, although it is not always clear whether they were permanent or temporary jobs.

These findings echo the results of the survey questionnaire that I administered to translation companies operating in Portugal and where these two methods for finding translators rank very low among translation companies, in particular for freelance collaborations. Translation companies prefer more trustworthy sources of candidates, such as their own internal databases. This is also more cost-effective, as it avoids sifting through numerous low-quality applications that inevitably are submitted for ads in mass media.

In these ads, Source-language competence is mentioned most frequently, and Target language is only mentioned when it is not Portuguese. Technological competence and Translation service provision – Production competence are also mentioned in this group of ads, although mostly in vague terms. As these are in-house positions, it is unsurprising to see the Translation Service Provision – Interpersonal competence specified frequently and in detail. No reference is made to Intercultural, Information Mining, or Thematic competences.

Experience and Education are two relevant signals in this group of ads. They are mentioned in most of the ads and specified in detail. As far as Education is concerned, a degree in translation or languages is required where this signal is mentioned. Certification is an irrelevant signal in this group of ads, reflecting the inexistence of widely recognized Portuguese certification systems for translators.

These signals for positions as in-house translators contrast with those that can be found in advertisements for freelance translators on specialized sites like ProZ. Here most ads are on a project basis, and the emphasis is on a swift placement of the project. Language pairs are specified, but the actual proficiency required is seldom mentioned. Thematic competence is mentioned in the form of specialization in the project and Technological competence is specified in the form of the tool that is necessary to complete the task. Experience is mentioned in two cases, albeit in vague terms. Translation Service Provision competences are not specified, nor is Education. Testing is mentioned in one ad. Once again, no reference is made to Certification.

The remaining group of ads are for collaborations with European institutions, for freelance and in-house positions. All these ads are very detailed in terms of Source and Target language competences. The ads for freelance translators specify the desired Thematic and Technological competences in detail. This is not the case for the in-house

position. Conversely, Translation Service Provision – Interpersonal competence is specified in great detail for the in-house position, and not for the purely freelance positions. Experience is a relevant signal in all ads for freelancers. A university degree is a specific requirement in all ads. Tests are the rule for European institutions. Once again, certification is deemed irrelevant as a signal. Although certifications systems exist in some countries, Certification is very ineffective as a signal even in international sites or organizations.

The signals in ads vary substantially depending on the desired outcome. On platforms like ProZ, the focus is on competences that enable the translator to complete the task. ProZ and similar platforms often work as reverse auctions, which means that job posters take quotes on the projects and bidding trends the price down, as this increases the chances of getting the job. Thematic and Technological competences tend to be signaled more strongly in this case.

Large institutions like intergovernmental organizations require highly qualified collaborators. Therefore, even for freelance collaborations, there are strict requirements in terms of education and experience, which require documented proof. For the remaining competences, a testing procedure is foreseen, in particular for Language and Translation Service Provision – Production competences.

Traditional recruitment procedures via press ads or advertisements on job search websites tend to be vaguer than the above. They rely heavily on language competence, experience and education as relevant signals from applicants. The remaining competences are usually specified in vague terms, non-specific to translation. Nevertheless, it is meaningful that for all these positions as in-house translators, some form of Interpersonal competence is required, as these translators will be working with members of staff specializing in other fields.

This is a trend that I also observed in the survey questionnaire, where the Interpersonal competence is more relevant for the recruitment of in-house translators than of freelancers.

5.3 Signals in recruitment procedures

A survey questionnaire was devised to better understand the signaling mechanisms and interaction specifically among translation companies operating in Portugal during their recruitment procedures. The translation industry is highly asymmetrical. At one end there

are numerous independent professionals and microenterprises, while at the other end only a small number of larger companies can be found. This asymmetry affects hiring decisions and recruitment practices.

Historically, freelancing is a common form of professional relationship between translators and clients. In Portugal, according to the survey results, freelancers outnumber in-house translators by a ratio of 6.5 to 1. This study focuses on freelancers because this is the most common form of employment for translators in Portugal. Other than historical reasons, there are also relevant economic factors for this. A freelancer or independent professional is usually hired on a per project basis, and they thus do not represent a permanent cost. On the other hand, in-house translators, like any other in-house staff, do represent permanent costs in terms of salaries and social security contributions. That said, as Fraser and Gold (2001) found, freelancing is frequently a voluntary choice among translators. In their survey of freelance translators in the United Kingdom, Fraser and Gold (2001) note that 76 percent of respondents said they would decline an offer to work in-house. The main motivation for becoming a freelancer, according to the survey results, were: 1) always wanting to be freelance, 2) wanting a change from an in-house translation job, and 3) wanting a change from a non-translation job. Other reasons included the need to accommodate changes in life circumstances, like childcare. The ability to exert greater control over working hours and client relations surfaced as strong reasons for freelancing. Could this be the case for Portugal as well?

All companies in my survey reported recruiting freelance professionals but only 60 percent reported recruiting in-house translators. There is a strong correlation between company size and recruiting in-house translators, with larger companies reporting recruiting in-house translators more frequently than smaller companies. Notwithstanding, in the interviews carried out as recently as 2022, a clear trend was noticeable across companies to limit in-house staff to project managers or highly specialized translators and reviewers. Translation work proper is increasingly being outsourced and/or transitioning to machine translation. The trend highlighted above may be the result of an expectation that automation will increase, but it cannot be ruled out that the market now has an abundant supply of trained translators and companies no longer feel the need to retain talent in-house. Or it could be that, as in the United Kingdom, translators simply prefer to work as freelancers and talent for in-house positions is thus hard to find.

As shown in Table 17, the main methods used by companies to find in-house translators are recommendations by other professionals and company databases. Press ads

came up next, followed by an ad on a job search website or a social media post. The first two methods have an informational advantage over the last three, as they come from reliable sources. They also represent lower costs than publishing an ad in the press or filtering through all applications received through social media or sites for translators.

For freelance translators, companies also rely mainly on recommendations by other professionals and company databases due to the informational advantage, and also because they are quick and convenient. As a secondary method, ads on websites for translators were also mentioned. Although convenient, this method brings added costs.

When asked about the relevance of signals related to competences in recruitment procedures, participants ranked the same top three competences for recruiting in-house and freelance translators. Table 29 compares the relevance of competences for in-house and freelance translators. Competences are ranked in descending order of relevance.

Table 29. Relevance of competences for in-house and freelance translators

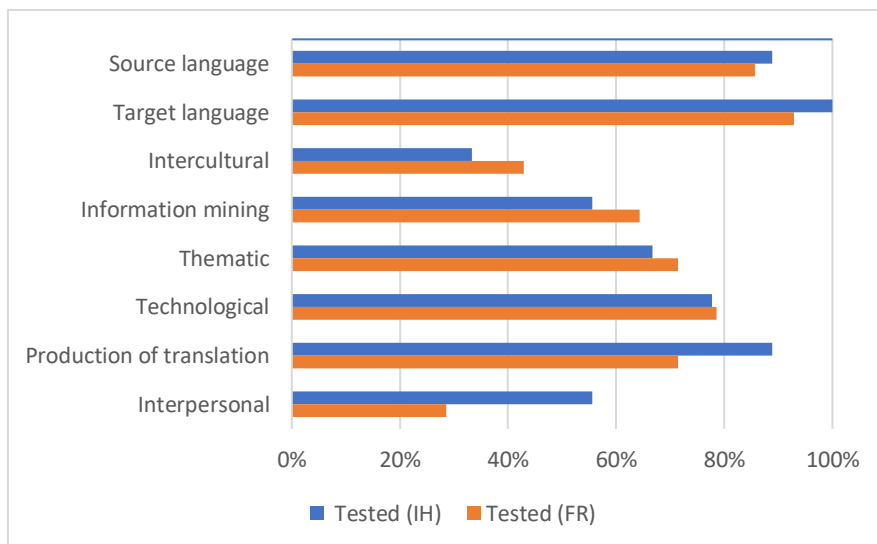
In-house Competence	Mean value	Freelancer Competence	Mean value
Target language	4.89	Target language	4.93
Source language	4.67	Source language	4.71
Production of translation	4.67	Production of translation	4.71
Intercultural	4.33	Information mining	4.64
Information mining	4.22	Thematic	4.50
Technological	4.22	Technological	4.36
Thematic	4.11	Intercultural	4.21
Interpersonal	4.00	Interpersonal	3.86

Target language is the most important competence, followed by Source language and Production of translation. The least important competence in either case is Interpersonal, but even less so for recruiting freelance translators. It is interesting to note that the relevance of competences consistently reaches higher mean values for the recruitment of freelance translators except for one case, suggesting a higher level of agreement among respondents but also a more acute perception of the signals for a quick and correct evaluation of the candidate. It is fair to assume that candidates for in-house positions will go through a longer recruitment procedure, including an interview, so they will have more opportunities to overcome information asymmetries. For freelancers, on the other hand, there is sometimes no time for a formal procedure, and interviews are rare. During the interview stage of this study, some companies reported having an onboarding system whereby newly recruited translators are closely monitored by more experienced peers for a period of time or a set number of projects until they become vetted, i.e. until

a minimum threshold of information is met. This kind of practice suggests that companies overall privilege longer-term relationships with freelance translators.

Figure 22 compares the testing of competences.

Figure 22. Testing of competences in applicants (in-house vs freelancer)



Target language, Source language, and Production of translation stand out once again as the three most tested competences. Tests for these competences are more extensively used in recruitment procedures of in-house translators but companies report using them at nearly the same levels for freelance translators. Interpersonal is the only competence where a very significant difference is seen, and it is also the least tested of all competences.

As noted above, the high coverage of testing in key competences suggests low trust in the signals transmitted by candidates.

Regarding other secondary signals transmitted by candidates, Table 30 ranks these signals in descending order of relevance in recruitment procedures for in-house and freelance translators.

Table 30. Mean value of secondary signals (in-house vs freelancer)

In-house Signal (IH)	Mean value	Freelancer Signal	Mean value
Higher education	4.75	Professional experience	4.5
Professional experience	4.5	Higher education	4.42
Direct recommendation by other professionals	3.75	Direct recommendation by other professionals	4.35
Recommendation letter	2.875	Recommendation letter	3.07
Certification	2.5	Certification	3
Member of a translator association	2.125	Member of a translator association	2.78

Higher education is the most relevant signal for an in-house position, whereas Professional experience is the most relevant for a freelance collaboration. It is interesting to note the difference in relevance of Direct recommendation by other professionals echoing a similar difference in the main methods used to find in-house and freelance translators. Globally, these secondary signals rank higher in terms of relevance for freelance translators than for in-house translators. A similar configuration was observed for the competences.

Interestingly, Certification is among the least relevant signals in both cases. This is most likely because of the inexistence of a professional certification system that is widespread and recognized in Portugal. APT is the only association to run a competence certification program in Portugal but since 2016 they have only issued certification to 14 members. The most relevant benefit of this certification is that one appears at the top of the search results in APT’s search engine. The certification is not regulated by any law or government institution. However, I would note that translators working for Portuguese companies may reside anywhere in the world and in some locations Certification may be a relevant professional standard or a requirement for a translation to be accepted. The low value of the signal can also be interpreted as a proxy for directionality in the translation work performed by the surveyed companies, i.e., a lower value hints at more volume being produced into languages that do not require certification, like Portuguese. Should companies be producing translations for countries where Certification is more relevant, or mandatory for some legal settings, one would expect this signal to be more relevant.

Low trust in signals can also be a result of gaps in competences or skills. In this sense, the question to companies regarding the areas in which they provided training to in-house or freelance translators also yields data on missing skills.

Nearly all companies reported providing training to in-house translators but only five provided training to freelancers. Table 31 shows the competences in which the most training is provided by companies to in-house and freelance translators.

Table 31. Volume of training provided per competence (in-house vs freelancer)

In-house		Freelancer	
Competence IH	Mean value	Competence	Mean value
Technological	4.5	Target language	3.6
Production of translation	3.8	Technological	3.4
Target language	3.7	Production of translation	3.4
Information mining	3.5	Source language	3
Specialized technical topics*	3.4	Specialized technical topics*	2.8
Interpersonal	2.8	Information mining	2.6
Intercultural	2.7	Interpersonal	2
Source language	2.5	Intercultural	1.6

The differences between training provided to in-house and freelance translators are striking. In terms of volume, in-house translators receive substantially more training. Technological competence and Production of translation are the main areas in which in-house translators get most training from their employer. Target language is third. For freelance translators, Target language is the competence with the highest volume of training. It is followed by Technological competence and Production of translation. High levels of training in Production of translation and Target language competences are potentially indicative of gaps in initial training. These are also two of the categories where most testing occurs.

Plenty of training in Technological competence is normal, since tools are updated frequently and new tools come to the market all the time. There are new skills to be acquired and skills that need refreshing. One potential reason for the significant difference in the training of Technological competence could be the need to train in-house employees not only in translation and productivity tools, but also in back-office and management tools that freelancers do not have access to.

Finally, I look in more detail at training in Technological competence. Table 32 compares the volume of training in different components of Technological competence.

Table 32. Volume of training in Technological competence (in-house vs freelancer)

In-house		Freelancer	
Technological competence	Mean value	Competence	Mean value
Commercial CAT tools	4.4	Commercial CAT tools	4
MT and post-editing	3.5	MT and post-editing	3.6
General computing	3.3	General computing	2.2
Localization	3.1	Localization	2.2
Proprietary CAT tools	2.6	Proprietary CAT tools	1.8
Desktop publishing	1.7	Programming	1.2
Programming	1.2	Desktop publishing	1.2

Unlike the training in main competences, here nearly all items are aligned in terms of ranking. However, the actual volume of training reported is different. Commercial CAT tools and MT and post-editing are the areas in which most training is provided in both groups. Periodical updates to tools and emerging technologies require constant refresher courses. Next are general computing and localization, including tools for localization. Here a substantial difference in the volume of training is noticeable between in-house and freelance translators, and this difference becomes wider towards the end of the list. Niche skills like proprietary CAT tools, programming, and DTP come last.

5.4 Education as a signal

The job market for translators in Portugal is different from the rest of the economy. Only a fraction of translators work in-house; freelance collaborations are the norm, either working for direct clients or translation companies.

Spence (1973) used education as an example of a signal that can be used to assess the productive capabilities of an individual at the time of hiring. A signal is an observable characteristic of the individual that can be manipulated. Any individual can invest in education to manipulate this signal positively. Investments in education and learning have also been termed “human capital”, a non-physical form of capital that influences “future monetary and psychic income by increasing the resources in people” (Becker, 1993, p. 11). In Bourdieu, this is referred to “as *cultural capital*, which is convertible, in certain conditions, into *economic capital* and may be institutionalized in the form of educational qualification” (1986, p. 16). Education may also convey social capital by enabling membership in a group, professional or otherwise, and symbolic capital resulting, e.g., from the prestige that one gets for being a member of the group.

Spence also posits that any costs associated with the manipulation of a signal should be termed “signaling costs”. Signaling costs need not be financial: they also refer to the time invested, for example.

For this study, the financial return of acquiring an education is not so much a focal point as it was in Spence's US-based model. In the United States, tuition fees in higher education are a very significant cost in the annual budget of a student. In Portugal, education is substantially free, and higher education in the public system is highly subsidized by the state and affordable for students. However, data in this study regarding the student population and how it is distributed across cycles suggest that signaling costs for Master's programs are high enough to discourage individuals from enrolling, in particular students who finished their first-cycle program in translation or applied languages with a significant track in translation. All Master's programs except for one have a duration of two years. Tuition fees for second-cycle programs are also higher than for first-cycle programs. On top of that, while a BA degree (*licenciado*) in translation is a frequent requirement for potential translators, either in-house or freelance, during the ad survey or the questionnaire I did not come across any instance where a Master's degree was required or even mentioned as an advantage. During the interview stage of this study, some participants did mention that holders of a Master's degree are better prepared for translation work, but this came across mostly as an advantage and not as a strict requirement. First-cycle programs nevertheless outnumber second-cycle programs by a ratio of three to one in terms of number of students.

In any case, higher education ranks very highly as a signal observed by translation companies in Portugal. It is the most relevant non-competence signal for recruiting in-house translators, followed by professional experience. In the case of freelance translators, professional experience is considered more relevant but higher education is a close second.

Let us then turn to one of the focal points of this study and compare the competences supplied by translator-training institutions with the competences in demand in translation companies.

Table 29 can also be seen as a ranking of competences, where Language competences and Production of translation competence are deemed the most relevant that translators should possess. For candidates for a position as in-house translator, Intercultural competence is the next most relevant competence, followed by Information mining, Technological and Thematic. Interpersonal competence ranks last, but the mean value is still in the upper bracket of the scale. This is compatible with the slightly more academically-trained profile required from applicants for in-house positions, as indicated by the strong weight assigned to higher education as a signal. Similarly, in Lafeber's impact ratings of 40 selected skills and knowledge types (2012, p. 99), which reflect the

reality at major IGOs, the top 10 positions relate to source or target language skills. Next comes the ability to produce idiomatic translations. The first non-language skill is the ability to maintain quality even under time pressure (12th position).

In the case of applicants for freelance positions, the ranking of competences suggests a profile more geared towards an established professional who possesses the necessary competences and skills to work autonomously. Intercultural competence is here second to last, followed by Interpersonal competence.

Let us now turn to the competences developed at higher-education institutions in Portugal, specifically in programs in translation or applied languages with a significant track in translation. Table 33 shows the overall weight of competences across all first-cycle programs.

Table 33. Competences in higher education (first cycle) (percentages)

Competence	First-cycle
Language 2/3	39.12
TSP - Production	19.66
Other	15.83
Intercultural	10.25
Language 1	4.86
Technological	3.99
Research	2.30
Thematic	2.00
Information mining	1.60
TSP - Production into L2	0.40
TSP - Interpersonal	0.00
Total	100.00

A comparison of the competences prioritized in first-cycle programs with the ranking of competences laid out in Table 29 reveals a mismatch of competences at the level of soft skills (Interpersonal) and more practical competences specific to translators. These are underdeveloped in undergraduate programs relative to job market expectations. First-cycle programs specialize in language learning.

I will now look at second-cycle programs to determine whether there is a better match between training and the professional practice. Table 34 shows the overall weight of competences across all second-cycle programs.

Table 34. Competences in higher education (second cycle)

Competence	Second-cycle	Second-cycle (no research)
Research	42.76%	-
TSP - Production	27.59%	48.21%
Intercultural	13.14%	22.96%
Language 1	3.23%	5.64%
Technological	3.07%	5.36%
Other	2.67%	4.67%
Information mining	2.45%	4.27%
Language 2/3	2.22%	3.87%
TSP - Interpersonal	1.57%	2.74%
TSP - Production into L2	0.78%	1.37%
Thematic	0.52%	0.91%
Total	100.00%	100.00%

Portuguese law stipulates that a Master’s program must include an element of research in the form of an internship (with report), a project or a dissertation. This is a problematic element for comparability, as the individual choices of students can change the program profile quite significantly, ranging from highly practice-oriented to highly research-oriented. For this reason, I chose to add an extra column to the table where I removed the Research category, so that the other competences are more visible and rebalanced accordingly. Comparability is also enhanced.

Research aside, TSP – Production competence is the key competence developed during this cycle of studies. There is a significant weight of more theoretical courses represented in Intercultural competence, to cater also for the Master’s students who are more interested in exploring the research path. All other competences account for 5% or less of the total ECTS. However, proportionally, the sum of the competences geared towards the professional practice of specialized translation (Technological, Thematic, Information mining) is more significant than in first-cycle programs, including courses that explicitly develop Interpersonal competence.

There are far more second-cycle programs in Portugal than first-cycle programs and the profiles of the programs are diverse. This means that there is ample variation in nearly all competences across programs, as shown in Figure 6. In all, second-cycle programs offer a range of competences that is more aligned with the industry, especially if students take the route of the professional internship.

Translation into L2 is a marginal competence in the context of Portuguese higher education. Companies have reported very infrequent use of translators into non-native languages. In the questionnaire, only one small company reported this practice. Here too the translator-training institutions are globally aligned with the market expectations and needs.

During the interview stage of this study, it became apparent that part of the relevance attributed to an academic qualification in translation stems from a requirement of the ISO 17100:2015 standard, and not from genuine trust in academic diplomas as signals. In fact, most participants had a fair share of criticism for the initial training of translators, highlighting shortcomings and skills gaps. Moreover, participants mentioned that there is little communication between academic institutions and companies, especially outside the scope of internships.

5.5 The asymmetric industry

In 2017, the translation industry in Portugal, as captured by CAE Rev 3 activity 74300 Translation and Interpreting Activities, was small and full of contrasts. It was small in size relative to GDP and populated by very small operators and a handful of large players. “Individual enterprises”, a term used by statistics organizations to refer to independent professionals (i.e. freelancers), represented over 90% of enterprises.

The total number of enterprises peaked in 2008, fluctuated while the country went through two massive financial crises, and recovered to pre-crisis levels in 2016. However, two long-running trends are noticeable in the data that I have collected: a) the ratio of companies to freelancers has been slowly shifting towards a larger proportion of companies, indicating overall concentration in the industry, and b) turnover has expanded quite significantly, growing in a slow, steady fashion among both freelancers and microenterprises, and increasing by two or three-fold among larger companies. Once again, this is a strong indication of heavy concentration in certain segments of the industry, especially in terms of revenue.

Although it is a minor market in European terms, Portugal compares favorably with EU (28) data across the sector. Growth rates are stronger in Portugal by most measures, especially after 2015. Trends towards concentration are also evident at European level, with very large companies having an increasing share of the market and turnover.

Narrowing the analysis to companies (i.e., enterprises with two or more persons employed), in 2017 the picture of an asymmetric industry prevailed. Geographically, companies were concentrated around the two largest cities. At one end of the industry, we have the 20% largest organizations generating 80.6% of the turnover, while at the other end nearly a third of all companies were not making a profit and one fifth of all companies were technically bankrupt.

Companies employed a total of 829 persons in 2017. On average, companies had three employees, and the total number of professionals directly engaged in translation was estimated to be 448. The remaining were managerial, administrative, and support staff. Given the small size of most organizations in the industry, it is expected that in many companies managerial roles coincide with translation-related duties.

The average yearly salary in translation companies in 2017 was around 16 000 euros. Freelance translators earned, on average, just under 8 000 euros, below the minimum wage. It is clear that translation is a part-time, secondary activity for many freelancers.

The number of associations has remained stable, as have membership figures, except for APTRAD. This is the most recent of all translator associations and it has been successful at attracting new members. This suggests greater cohesion in the sector.

We thus find a highly asymmetric industry in 2017. This is not a significantly different panorama from what Ferreira-Alves had found in 2005, characterized by a highly fragmented market of very small operators. Nor is it significantly different from the Portuguese economy as a whole, where microenterprises account for 89% of all enterprises and small and medium enterprises (SME) account for little over 10%. This proportion has not changed meaningfully since the mid-2000s.

However, a recent trend was picked up in the data that I collected from official statistics institutions for this study: larger organizations are growing very strongly and smaller enterprises and freelancers are competing for an increasingly smaller share of the market. That is, turnover in the sector has grown strongly, but it is increasingly concentrated in the hands of larger operators. The fact that turnover is not proportionally trickling down to smaller companies and freelancers suggests that the large companies are not outsourcing the work to smaller local market operators.

However, a proportional increase in the number of employees in large companies is not noticeable either. This suggests that part of the newly-generated turnover is for translation activities into languages other than Portuguese, and the local market is not being tapped for this kind of work. It may also suggest that technology is increasingly being used by larger operators, with tremendous productivity gains. And it may also be the case that companies are expanding into other areas of business, like digital content management. Given the small size of the market, the numbers should be read carefully, as the entry, relocation or failure of a larger player may have a disproportionate impact in global sector figures. The interview data strongly suggest that automation, in particular

machine translation, is a strong driver of business growth, with little impact on boosting employment numbers, in particular for in-house translators. A sign of this was visible during the interviews, when two companies mentioned being about to initiate recruitment procedures: two new positions as project managers, but only one position as a specialized translator. Internships for translators finishing their translation programs, generally with an approximate duration of six months, are very common.

There seems to be a very strong incentive to create larger organizations, as this grants companies access to more profitable segments of the market, greater productivity, and the financial strength to meet the demands of investments in technology. Translation company associations could have a significant role to play in this area, fostering the transition of individual enterprises into companies.

This asymmetry has a specific impact in this study, since I have been able to determine that the size of the organization is a very relevant variable in terms of recruitment practices. This is visible not only in the profile of the translators that are hired but also in the kind of collaboration that companies are willing to engage in.

5.6 From training to market

Critics often refer to universities as an ivory tower, a seat of privilege that is disconnected from reality. However, there are a number of learning paths that have direct links to the labor market. Translation is one such path.

In the past, courses for training translators received criticism for being distant from professional practice. The Bologna Process brought about an opportunity for higher-education institutions to review and adapt their existing programs or create new ones under the new rules. In countries like Portugal, where undergraduate degrees would last from three to five years depending on whether the program was taught at a polytechnic or a university, adaptation to the Bologna model had a significant impact. Most notoriously, undergraduate degrees were shortened and a number of Master's programs were created.

However, this transformation did not happen without criticism. In fact, the EMT expert group noted that a number of universities in Europe were seen “launching a translation program, often with the aim of recycling or of renewing their language teaching” (EMT, 2009, p. 1). Durão (2007) made similar remarks in her survey of first-cycle programs in the Portuguese university system shortly after the implementation of

the Bologna Process. She concluded that the programs mentioning translation as one possible career path essentially trained students in languages, literature, culture and linguistics. Translation had little weight in such programs, and specialized translation was nearly absent.

Ten years onwards, now with the Bologna rules fully in place for all three cycles, this study has revisited translator training in higher-education in Portugal. Data is now abundant and publicly available, especially for the first-cycle programs.

As shown in section 4.1.1, first-cycle programs in translation or applied languages with a significant track in translation have language learning at their core. In these programs, 39.1% of all ECTS are allocated to L2/3. Translation Service Provision – Production is the next most relevant competence at 19.6%. Although there is significant variation across programs, I no longer see the situation of overwhelming weight of languages, literature, culture and linguistics and underrepresentation of Translation in such programs as reported by Durão (2007). This heavy focus on language learning is necessary because students coming out of secondary school are expected to attain CEFR level B2 for L2 (usually English) and A2/B1 for L3 (Spanish, French, German, or Chinese in select schools). If the EMT recommended pre-requisite of CEFR C1 level for working languages is assumed, then a significant effort needs to go into L3 over the duration of the first-cycle program.

First-cycle programs are largely practical. Research and Intercultural competence contain the more theoretical courses, and they do not account for more than 13% of the total ECTS. However, I would note that undergraduates receive very little training in Technological and Thematic competences. This is further aggravated by the fact that in some programs these competences are not present at all, as shown in Figure 5. The Other category includes courses that do not fall under other categories or electives where the student has a wide array of choices that cannot be brought under other categories. This is an indication of flexibility in the learning path.

In second-cycle programs, the prevailing competences are Research and Translation Service Provision – Production. Research is a special case and it stems from a specific requirement in Portuguese law. Second-cycle programs must incorporate a dissertation, a project, or a professional internship worth a minimum of 30 ECTS. Depending on student choices, this may make a program more theoretical or more practical. In all cases, students are required to submit a report or a dissertation and present (or defend) it in a public session. Although there are no official public numbers for these

choices, we informally asked some program directors about the choices of students, and we were told that internships account for approximately 50%. This is an indication that students see second-cycle programs as a gateway to professionalization.

Table 35. ECTS distribution in first- and second-cycle programs (percentages)

Competence	First-cycle	Second-cycle
Information mining	1.60	2.45
Intercultural	10.25	13.14
Language 1	4.86	3.23
Language 2/3	39.12	2.22
Other	15.83	2.67
Research	2.30	42.76
Technological	3.99	3.07
Thematic	2.00	0.52
TSP - Interpersonal	0.00	1.57
TSP - Production	19.66	27.59
TSP - Production into L2	0.40	0.78
Total	100.00	100.00

Table 35 shows the distribution of ECTS per competence in first- and second-cycle programs. The large weight of language learning in first-cycle programs is replaced with the Research component in second-cycle programs. Translation Service Provision – Production is significantly more relevant in second-cycle programs. Intercultural competence is also more relevant in second-cycle programs. Going in the opposite direction, Technological and Thematic competences become less significant in second-cycle programs.

There is very significant variation of competences across programs, with some clearly specializing in Research (Universidade de Évora and Universidade dos Açores), whereas other programs keep this competence down to the legal minimum and focus more on TSP – Production (Instituto Politécnico do Porto). Figure 6 highlights this variation. The limited weight of Thematic and Technological competences also suggests a lack of specialization across programs.

I also noticed considerable difference in the Other category. Second-cycle programs are more focused, and students have less options available to tailor their learning path.

Table 36 shows the distribution of the total student population in translation programs or applied language programs with a significant track in translation across all cycles in 2015-16. There is a significant drop in the number of students from the first-cycle to the second-cycle programs. The latter have less than one third of the students than the former, suggesting that a Master’s degree is not perceived as necessary. By law,

translators in Portugal are not required to have a formal qualification, not even for legal contexts or jobs involving notarizations.

In the 2015-16 academic year, 424 students were admitted to first-cycle programs through the national selection process. Considering the total population of first-cycle programs, this number indicates a stable intake.

Table 36. Total student population and graduates (by gender)

	1 st cycle			2 nd cycle			3 rd cycle		
	Total	M	F	Total	M	F	Total	M	F
Population	1409	486	923	409	110	299	19	2	17
Graduated	259	72	187	92	22	70	0	0	0

There were three doctoral programs running in 2017, and they devote the entirety of their ECTS to Research. Doctoral programs cater specifically for students seeking advanced research skills and/or a qualification for teaching at university level.

Finally, I should also highlight that women are disproportionately better represented in more advanced cycles.

Chapter 6. Conclusions

6.1 Findings

In this thesis, it has been shown that the signaling mechanisms during translator recruitment procedures are not effective. The most relevant signals for employers are higher education and professional experience, and the most relevant competences are Target language, Source language and Production of translation. All these competence-related signals display high coverage of testing, both for prospective in-house and freelance translators.

Testing generally correlates positively with the perceived relevance of the competence, but not necessarily with its complexity. In other words, testing is concentrated on tasks that are essential to produce the translation (Target and Source language, Production of translation and Technological). Analysis of training provided by companies also indicates that the most significant skills gaps lie in Target language, Production of translation and Technological competences, all of which are among the most tested.

Testing is a verification mechanism that ensues from low trustworthiness. Lack of trust severely undermines education as a signal. Although the survey questionnaire responses indicated that signaling already occurs in a non-zero trust environment, as employers turn mostly to company databases or recommendations to find translators, i.e. sources where a minimum of trust exists, I have established that companies do not trust signals related to some of the competences that are most extensively trained in higher education. This is corroborated by the high levels of testing and by my interview data. However, holding a university degree is also a signal that is deemed relevant by employers, not the least for their own certification requirements. My findings thus point towards signaling deficiencies in the Portuguese translator job market, which result in higher costs for all parts. Tests are the most visible example.

Trust-building initiatives like visits or collaboration in research or practice-oriented projects could bring companies and universities closer together, foster mutual trust, thus reducing signaling costs.

Translator training has evolved substantially over the last few years and presently offers diverse options for anyone seeking to acquire competences in translation. There are programs at BA, MA and PhD level, and results of the national selection process for

first-cycle programs show that translation is an area that is able to attract highly-talented students. BA programs distinctly focus on language learning and production of translation, whereas MA programs focus heavily on production of translation and more theoretical aspects. Technology is not a prominent feature in either cycle of studies. Some MA programs have joined the EMT network, indicating that they are aligned with their European peers. I also highlight that many of the MA programs are open to students from other areas, enabling the training of translators with different backgrounds. It is thus reasonable to conclude that translator training is well organized in Portugal, there are opportunities for specialization and a body of research is being established in the field.

Technological competence has a limited space in university curricula, averaging around 5% of ECTS at MA level and 4% at BA level. This was a common source of criticism in the interviews, and the data related to training provided by companies show that Technological competence is by far the area in which translators receive most on-the-job training. In the interviews, participants mentioned MT as a transformational technology for the industry. In this particular area, universities and companies are adapting at very different speeds, and this risks increasing the divide between translator trainers and employers.

As far as the translation industry in Portugal is concerned, it is also generally aligned with other European countries in terms of concentration, weight in the economy and company profiles. There is an overabundance of individual enterprises (i.e. freelancers) and a very limited number of large companies. The sector has been growing as a whole, but the number of persons employed has not kept pace with the overall growth rate. The sector is trending towards an organization of labor where management tasks are carried out by in-house staff and language related tasks are outsourced to freelancers. The overall proportion of freelance work was already very high in the sector. This leads to the conclusion that although companies enjoy greater flexibility and lower fixed costs with human resources, they face higher recruitment costs because freelancers are not permanently available to a particular company.

6.2 Applicability

This study can contribute to bridge the gap between translator trainers and translator employers. Throughout the study, it became apparent that there is very little

communication and even less collaboration among these two sides. Internships are an exception.

It also has the potential to promote a greater alignment of interests of translator training institutions and companies, thus increasing employability in the sector and reducing costs. Although the employability given for the BA programs on the DGEEC website seems quite spectacular, with numbers well above 90% for the programs analyzed here, little is known about where exactly the graduates found employment. As such, little can be said about the quality of said employment. Such data are not available for MA programs.

As Hao (2022) reveals in very recent study in Melbourne, Australia, only about one third of all translation graduates end up working in translation. Her study is corroborated by findings in other similar studies from other parts of the world. However, the little data available in this regard also suggest that the other forms of employment found by translation graduates are to a large extent related to languages and appropriate for the qualifications of a university graduate.

6.3 Contribution to the field

I expect that this thesis contributes to the development of empirical Translation Studies, especially in Portugal. I would also hope that it brings more visibility to translation companies as a subject of empirical studies, as it is the first study where they feature prominently. Historically, translation has been a sector of small agencies or freelancers, but these small operators have not received much attention from research. Producing data that informs these companies about the market and translator training, and taking their voices to academic settings has the potential to help develop the sector as a whole by aligning interests and sharing knowledge.

As regards methodology, by successfully incorporating proven concepts and methodologies from the field of economics, I also hope to make way to advancing interdisciplinarity across these two fields. Moreover, I will seek to make use of the tools devised in this study to establish an information system that can be of use to both researchers and economic agents, promoting contact and collaboration between translation companies and universities. Professional and business associations will be instrumental in this endeavor.

6.4 Limitations of the study

Even in a small market like Portugal, a study can only go so far. The view that has been produced is based on a small number of participants. Higher participation rates would make the findings more representative, but potential participants often lack the motivation to answer questionnaires or show up for interviews.

Data are fast and some sets of data are slow to be processed and be made available, such as the official data on economic activities. It takes over a year for tax-based data to become publicly available. Industry surveys, on the other hand, produce results faster but they are not as granular as the large data sets of official statistics agencies, which give better insight into smaller operators.

The benchmark that I have developed has its own limitations. Firstly, it was based on a model built with the needs of Master's degree in mind, and it has been shown that BA and MA programs pursue different objectives. Moreover, the benchmark does not pick up important skills development initiatives that take place outside the specific scope of translation programs. At my university, all BA students participate in an annual event called My Career organized by the career office. Students attend conferences about career development and take part in workshops designed to help them draft a CV, a motivation letter and how to prepare for a job interview. Such initiatives are currently not picked up by the benchmark, neither would hands-on seminars on budgeting, invoicing or taxes for translators. Considering the pivotal role of the benchmark across the project, it is worth revisiting the design to accommodate such initiatives.

6.5 Avenues for future research

Increasing the granularity of data through the recruitment of more small translation companies would enable more insight into these companies' needs and anxieties. We are potentially at a pivotal moment in translation with machine translation becoming more widely used, and there is a need for data to inform both operators and trainers on the technologies and their impact on the profession and the market.

Perhaps most importantly, the development and validation of instruments for the collection and analysis of empirical data would enable an acceleration in the flow of information, as well as replication and adapting for local needs.

The perspective of translator training institutions is remarkably absent in current literature. Understanding how they work and which constraints they face may shed light on possible solutions for commonly criticized aspects of higher education.

Considering the pervasiveness of testing in the industry and the bad reputation of tests among translators, it would be relevant to understand the translators' perceptions of tests and why they ultimately take them or not.

Employability of research graduates needs to be researched in detail. Recent studies and data collected by university career offices suggest that no more than a third of graduates from translator training programs go on to work as translators, reviewers or post-editors. Many find work in related areas, such as project managers, while others find employment in other areas of the language services industry, like teaching. It is important to determine what is happening downstream to possibly adapt the program curricula in the right direction, and further narrowing the training to skills directly or exclusively related to translation might be ill-advised without accurate data. Research may provide input on the best paths for the transference of competences and flexibility.

6.6 A new normal

So far I have been looking at translation as a product of humans. This study has analyzed the signaling interactions that occur between translation companies and translators when they are in the process of establishing a professional relation. This study has also included background data on the industry in Portugal for a better understanding of the constraints and incentives that companies are faced with. Another layer of information was added with the inclusion of data regarding translator training in the Portuguese higher education system.

During this research period, it became apparent that a momentous change is occurring in translation. It is no longer a reserve of translation professionals, if it ever was.

Human translation may account for 0.68% (Pym & Torres-Simón, 2021, p. 480) of the total volume of translations performed by Google Translate, one of many MT systems available online. The explosion in the production of digital content, in particular media content, has elevated interest in the translation of such content. Significantly, most media content nowadays is produced by amateurs who then post it on social media. This content is generally produced for fun, not specifically with profit in mind. However, on a

globalized platform like the Internet, the audiences are much wider and sometimes unintended. Translation thus becomes a way of establishing communication. And for most of this content, there is no budget for translation.

The convenience of having an app on the phone translating the restaurant menu or the street signs in a foreign country is also something that we have come to appreciate and take for granted, no matter how funny some occasional blips in the translation might be.

These are just two examples of MT at work in contexts where professional translators would hardly ever work. Only the extremely wealthy can afford a translator/interpreter permanently at their side when traveling, and not many people are willing to pay for the translation of a Tik Tok video depicting the latest viral pasta recipe.

Moreover, the web is increasingly rife with content that is short-lived and requires quick translation to get to as many people as possible in the shortest period of time. There are also apps that specifically delete content after a relatively short period. In these contexts, production quality is not a priority, so neither is translation quality. Translations of such content have to be fast, and accuracy issues become a minor nuisance for the user of the translation.

This is the optimistic view of MT in economies where there is a choice of using MT for quick access or human translation for higher quality output. In many parts of the world, MT is literally the only form for people to have access to content in a foreign language. Underdeveloped education systems, political regimes or corporate policies undermine the access of people to content in a foreign language. In these cases, MT is a form of enabling access to information, culture, ideas, and entertainment.

MT holds the promise of eventually replacing human translation, but the data that I collected throughout this study suggest otherwise. The results presented in section 4.2 show solid growth in the number of persons employed and in turnover in the sector. Demand for professional translation services is untouched. In fact, it is growing.

In a paper presented at the 10th Colloquium on Translation Studies in Portugal (Brogueira, 2017), I surveyed Portuguese translators regarding their perceptions of MT and how it could impact their professional situation. Living up to the title of the colloquium – *Translating Fear* – I set to find out whether MT instills fear in translation professionals. The final section of the survey dealt with professional satisfaction. Respondents were asked to state their satisfaction in four areas: income, social recognition, fulfilment, and working conditions. Most translators in that study reported being happy

or very happy with their working conditions and feeling professionally fulfilled. Income and social recognition were the items where respondents stated lower levels of satisfaction.

Then respondents were asked to state how a scenario of undertaking mostly post-editing or revising MT output would affect their satisfaction with the same items: income, social recognition, fulfilment, and working conditions. The answers were overwhelmingly in the direction of a lower satisfaction. Social recognition and personal fulfilment stood out as the items where respondents felt that MT could severely affect their satisfaction.

Finally, when asked whether they would abandon the profession if they were only post-editing, 26% answered that they would abandon the profession, 37% answered in the opposite direction and 36% answered that they did not know.

Significantly, only 43% of all respondents reported having participated in projects involving MT, of which only 20% rated it as a negative experience. Translators seem apprehensive about MT, and the proportion of people willing to abandon the profession to those who actually had a bad professional experience with MT makes me think that there is some irrational fear surrounding MT among professionals.

The figures on the ELIA report corroborate this view that translators are hesitant to embrace MT in their own practice. Companies, on the other hand, are increasingly favorable to the adoption of MT.

During the interviews, participants in this study reported wide variation in the use of MT, but in some cases it was as high as 50% of all projects, and they also highlighted post-editing as a skill in high demand. The data on the translator training programs in section 4.1 indicates that translator training programs are lagging behind. Each program faces its own set of constraints, budgetary or otherwise, but the overall conclusion is that training programs for translators lack the input from innovation that is commonly understood as part of the mission of tertiary institutions.

Considering the modified EMT 2009 model of competences that I used throughout the study to collect comparable data across the industry and higher-education institutions, we can see that MT will have an impact mainly on three competences: Source language, Target language, and Production of translation. For its innovative nature and articulation with MT and other technologies, it is reasonable to assume that Technological competence will be reshaped and expanded.

Production of translation is the competence that will be most affected by this transition. However, training in this competence will still be relevant to understand the process of translation and devise the best translation and (post-)editing strategies. Moreover, there are several fields where creativity and human translation will continue to be essential. I envision a change in the direction of higher cognitive skills being required for this particular competence.

Target-language competence will probably largely lose its generative component. In contexts where MT is used, translators will essentially become (post-)editors. Machines are much better than humans in aspects like speed, consistency, spelling or following instructions. Therefore, human intervention will focus on fluency and style.

Source-language competence is not going to be especially affected by MT, but the interaction with source language will become much less extensive, and the array of tools available for searching and organizing information will also make this competence more specialized.

This shift is represented in Table 37 using the minimalistic translational competence model by Pym (2003, p. 489):

Table 37. Shift in translational competence

Human translation	MT (with post-editing)
The ability to generate a series of more than one viable target text (TT ₁ , TT ₂ ... TT _n) for a pertinent source text (ST). The ability to select only one viable TT from this series, quickly and with justified confidence.	The ability to evaluate one viable target text (TT) for a pertinent source text (ST). The ability to edit, if necessary, the TT, quickly and with justified confidence.

Having been in the industry for over twenty years, mostly working at the cutting-edge localization programs of the major players of technology, I have witnessed many of these developments from a short distance. In my current role as review team coordinator, I am called upon to evaluate other members of the team and potential new members.

The processes vary significantly from company to company. Some have a minimalistic approach and run a simple test for basic competences in translation and localization. Others devise very complex tests involving multiple competences, including translating different types of materials (help texts, marketing materials, software strings, etc.), reviewing translations with all sorts of errors and providing accurate and polite feedback about those errors, compiling terminology, and subtitling. This covers the full range of expected tasks to be carried out at a later stage. Moreover, applicants that are vetted in the testing procedure have to undergo an onboarding program, where they work

under the supervision of a senior team member. Both examples are for freelancers, although the more extensive testing and onboarding procedure is meant for a long-term collaboration, which also involves interactions with third parties on behalf of the end-client.

These procedures reflect not only the nature of the work to be performed but also the culture of the end client and of the language vendor who ultimately does the hiring. Neither of these two programs involve any testing in technology specifically, although applicants are expected to know how to use CAT tools.

Over the years, I have noticed that recently graduated translators or translators with little professional experience are not well-rounded. In particular, they lack professionalization skills, such as reading and following project instructions carefully. In localization, this is especially critical, as even the smallest transgressions in terms of character length may result in clippings and other interface problems. In highly regulated segments of the industry, minor digressions from established terminology or phraseology may result in documents being pushed back, causing delays to all subsequent stages of marketing. This issue with project instructions was also highlighted by companies in the ELIA report.

Another problem area is collaboration. Due to the size of these localization programs, they involve large teams. Working as a team, in particular in a translation setting, is not a competence that is frequently developed in translator-training programs. Although these localization programs implement style guides, terminology databases, and vast reference materials, either in the form of translation memories or access to previous translations, it is not uncommon to find translators who do not follow these materials out of negligence or simply because they preferred an approach different from other team members.

Although translators work mostly as freelancers, i.e. independent professionals, many projects call for working as a team and abiding by shared standards and practices. An alternative to formal changes in translator training programs, which can be lengthy and costly, would be adding workshops or labs for exchanging practices with industry specialists. These exchanges are valued by industry specialists, as they enhance social recognition and enable a deeper understanding of what is happening at translator-training level. For institutions and students, it is a way to be in touch with the industry and, if applicable, make some changes. In short, it is a way to develop skills that are in demand

and, in the process, build trust and enhance cooperation between translation companies and translator training institutions.

The data collected throughout the study regarding translator training suggest that little room is offered for experimentation. However, this can be achieved without the need for substantial investments. In fact, many providers of software used for translation – CAT software, MT software, or a combination of both – have special academic programs and they make their software or cloud solutions available for free, including extra licenses for home use.

Technological competence is then easily transferable. The underlying logic of most CAT tools is similar for the user of these tools even if names and interfaces differ. This is also the case for many proprietary tools developed internally by some companies. Data from the interviews also highlight this transferability.

CAT tools now have the option of interfacing with MT systems in the cloud. Sometimes for a fee, users of these programs can add MT to their toolkit. This provides a glimpse of the future ecosystem of technology facing the translator, where MT is an extension rather than a substitution of the human translator.

Of course, MT has its own problems. Everyone has their favorite story with Google Translate, and we all have had a laugh at one time or the other. Google is notoriously famous for providing its free services in exchange for some concessions in user privacy as stated in their Terms of Service (Google, 2020). In other words, users let Google use part of their data to improve its systems, and Google keeps the service free. This is such, that some translation companies specifically require that translators do not use Gmail or Google Translate because of the potential for confidential data breach.

As Portuguese users may be aware, Google Translate often mixes up the Brazilian and European Portuguese variants. This is not an exclusive problem of Google Translate. In fact, Google Translate and other neural machine translation (NMT) systems are “trained on huge corpora of pairs of source-language segments (usually sentences) and their translations [...] basically from huge translation memories containing hundreds of thousands or even millions of translation units” (Forcada, 2017, p. 292). However, for such corpora “a common practice is automatic extraction [...] from web resources, digitized books and other sources. Such data are prone to be noisy and include all kinds of problematic sentences alongside the high-quality ones” (Rikters, 2018, p. 126).

A very important component of the future work of translators involving MT will be the evaluation of MT output and understanding the implications of using MT,

including legal implications. This will engage expert-level target language competence and technological competence, as well as a healthy dose of skepticism.

There is thus a case for arguing that a new normal is settling in, at different paces. Translation is gaining importance and weight in society, and the convenience of free MT systems is creating a demand for translation. But let us be fair: most of that demand is not for professional, human-grade translation services. It is for a convenient, on-the-spot translation that is provided for free.

Translators, or whatever they come to be called in the future, are likely to evolve into language technology experts, being able to summon the best technology for each individual translation job and expand their abilities through technology. Moreover, as MT becomes ubiquitous, translators are likely to have a role in MT-literacy efforts.

Preparing students and current professional translators for this new normal is a challenge that will require cooperation between employers, trainers and employees. According to the data collected throughout this study, more innovative training, focusing on transferable competences, is highly desirable. Enhanced cooperation and mechanisms trust would, in turn, provide better signaling and reduce costs, e.g. with tests.

6.6 Final remarks

The depiction of Saint Jerome on the cover of this dissertation shows him alone in a dark study, laboriously translating the sacred texts. Except, perhaps, for the skull as a *memento mori*, popular imagination still has translators working alone, submerged in dictionaries. This could not be more distant from modern translation, where translators use computers, state-of-the-art software and often work in teams to tackle large projects.

The painting is little over 400 years old, but some translation tests are known to take place in similar circumstances. This is but one of the many signaling inefficiencies that I have come across throughout this research project. I would hope that this dissertation can raise awareness to a practice that is prevalent in the translation industry, but economically irrational for all parties involved. Chan (2009) suggested that better certification mechanisms might improve the signaling and reduce information asymmetry, potentially leading to less costly and swifter recruitment processes. In Portugal, a credible and recognized external certification mechanism is not in sight. An alternative to certification might be increasing cooperation between training institutions and employers, spurring innovation and allowing trust to be built.

Tertiary institutions have come a long way in adapting their programs to market needs, but advanced research into competences and bridging the gap between the market and translator training institutions is yet to make significant strides. I hope this dissertation can mark the beginning of a long-running contribution.

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Appendices

Appendix 1 - Email inviting companies to take part in the survey (6/22/2017)

Exmos Srs,

O meu nome é João Brogueira e sou investigador em Estudos de Tradução, docente na Universidade Católica e também tradutor.

Este questionário, realizado no âmbito do programa de doutoramento da Universitat Rovira i Virgili (Espanha), integra-se num estudo mais alargado que visa compreender em que medida as competências procuradas pelas empresas de tradução (pessoas coletivas) encontram resposta na formação académica em Tradução oferecida em Portugal.

O objetivo do questionário consiste em determinar que competências são procuradas pelos prestadores de serviços linguísticos, de que forma as empresas avaliam os candidatos a colaboradores e, ainda, se existe uma hierarquia de competências. O questionário tem secções distintas para tradutores in-house e tradutores freelance.

O questionário foi concebido de forma a otimizar o tempo de resposta. O preenchimento do questionário online demora aproximadamente dez minutos e é constituído na sua maioria por questões de escolha múltipla. Pontualmente, são disponibilizados campos de resposta aberta onde pode fazer comentários ou fornecer mais informações.

Pode responder ao questionário qualquer pessoa na sua empresa que tenha responsabilidades de contratação de tradutores in-house ou freelance (gerente, gestor de projetos, responsável de RH, etc.).

Todas as respostas são estritamente confidenciais. Apenas o investigador, João Brogueira, e o respetivo orientador de tese, Professor Doutor Anthony Pym, terão acesso aos dados em questão. Toda a informação obtida dos inquiridos será agrupada para efeitos de divulgação de informação geral sobre sinalização e avaliação de competências, não sendo divulgadas informações de identificação pessoal em registos públicos ou em publicações. Os termos e condições do fornecedor do questionário online, encuestafacil.com, estão em conformidade com a declaração de privacidade supra.

Terei todo o prazer em responder a qualquer questão sobre a investigação. Para o efeito, pode contactar-me através do e-mail jcbrogueira@octante.net ou através do número de telefone (+351) 919036062.

Clique na hiperligação seguinte ou cole-a na barra de endereço do seu browser para participar:

<https://www.encuestafacil.com/RespWeb/Qn.aspx?EID=2283299>

A sua participação é muito importante.

Com os melhores cumprimentos,

João Brogueira

<https://www.linkedin.com/in/jcbrogueira/>

Appendix 2 – Survey questionnaire administered to translation companies

Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

1.- I. Inquérito às empresas de tradução

Inquérito às empresas de tradução sobre práticas de recrutamento (Portugal)

Este questionário integra-se num estudo mais alargado que visa compreender em que medida as competências procuradas pelas empresas de tradução (pessoas coletivas) encontram resposta na formação académica em Tradução oferecida em Portugal.

O objetivo do questionário consiste em determinar que competências são procuradas pelos prestadores de serviços linguísticos, de que forma as empresas avaliam os candidatos a colaboradores e, ainda, se existe uma hierarquia de competências.

Ao responder ao presente questionário, reconheço, de livre vontade, que estou a participar no estudo sobre Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores Freelance. Tenho conhecimento de que não receberei uma compensação monetária pela minha participação.

Compreendo que o objetivo do presente estudo é investigar a sinalização e avaliação de competências no mercado de tradução, que estou a fornecer informação relativa às minhas opiniões pessoais e que sou livre de suspender a minha participação em qualquer altura.

***Compreendo que todas as minhas respostas são confidenciais, na medida em que não serão divulgadas informações de identificação pessoal em registos públicos ou em publicações. Apenas o investigador, João Brogueira, e o respetivo orientador de tese, Professor Doutor Anthony Pym, terão acesso aos dados em questão. Os dados serão utilizados ao longo de um ano, sendo depois conservados por um período indefinido sob a forma de registos. Declaro igualmente compreender que toda a informação obtida dos inquiridos será agrupada para efeitos de divulgação de informação geral sobre sinalização e avaliação de competências.**

Os termos e condições do fornecedor do questionário online, encuestafacil.com, estão em conformidade com a declaração de privacidade supra.

Foi-me comunicado que tenho total liberdade para colocar questões sobre a investigação. Para obter mais informações sobre a investigação, compreendo que devo contactar João Brogueira através do e-mail jcbrogueira@octante.net ou através do número de telefone (+351) 919036062.

Sim, compreendi e quero continuar

Seguinte->



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

2.- II. Caracterização da empresa

Esta secção visa recolher alguns dados sobre a empresa e a pessoa que responde ao inquérito.

***Nome da empresa**

0/4000

***Pessoa de contacto**

0/4000

***E-mail de contacto**

0/4000

***Função na empresa (gerente, gestor de projetos, responsável de RH, etc.)**

0/4000

<-Anterior Seguinte->

12%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

3.- II. Caracterização da empresa

Esta secção visa recolher alguns dados sobre a empresa e a pessoa que responde ao inquérito.

***Quantos funcionários integram o quadro permanente? (indique um número na resposta)**

0/4000

***Quantos tradutores colaboram regularmente com a empresa em regime freelance? (indique um número na resposta)**

0/4000

<-Anterior

Seguinte->

19%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

4.- II. Caracterização da empresa

Esta secção visa recolher alguns dados sobre a empresa e a pessoa que responde ao inquérito.

***A empresa é membro de alguma associação de empresas de tradução?**

- Não.
- Sim, APET.
- Sim, outra(s) (por favor, especifique)

***Indique as principais áreas de especialização da sua empresa: (escolha, no máximo, 3)**

- Tradução audiovisual (legendagem/dobragem)
- Localização de software
- Tradução generalista
- Tradução técnica
- Transcrição
- Outra (por favor, especifique)

***A empresa tem um sistema de gestão da qualidade certificado?**

- Não.
- Sim, ISO.
- Sim, outro (por favor, especifique)

<-Anterior Seguinte->

25%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar ->

Continuarei mais tarde

5.- III. Processo de recrutamento

Esta secção visa recolher informação sobre os processos de recrutamento da empresa.

***A sua empresa contrata habitualmente tradutores in-house (contrato a termo incerto)?**

Sim Não

<- Anterior Seguinte ->

31%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

6.- III. Processo de recrutamento - Tradutor in-house

Esta secção visa recolher informação sobre os processos de recrutamento da empresa para um tradutor in-house.

***Escolha os métodos principais que utiliza para encontrar candidatos num processo de recrutamento de um tradutor in-house. Indique-os por ordem.**

	Método
Método 1	<input type="text" value="Escolha uma opção"/> <
Método 2	<input type="text" value="Escolha uma opção"/> <

Use este campo para fornecer informações adicionais sobre os métodos de recrutamento (opcional)

0/4000

<- Anterior

Seguinte->

38%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar-> Continuari mais tarde

7.- III. Processo de recrutamento - Tradutor in-house

Esta secção visa recolher informação sobre os processos de recrutamento da empresa para um tradutor in-house. Para sua conveniência, pode consultar no ficheiro de referência anexado ao e-mail do questionário as definições das diferentes competências.

*Para a seleção de um tradutor in-house, que relevância atribui à respetiva competência na(s) língua(s) de partida?

(Língua de origem ou língua-fonte são outras designações usadas para a língua de partida.)

	Nada relevante	2	3	4	Muito relevante
Língua(s) de partida	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor in-house, que relevância atribui à respetiva competência na(s) língua(s) de chegada?

(Língua de destino ou língua-alvo são outras designações usadas para a língua de chegada.)

	Nada relevante	2	3	4	Muito relevante
Língua(s) de chegada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor in-house, que relevância atribui à respetiva competência intercultural?

(Esta competência refere-se à capacidade de comparar e contrastar as práticas discursivas das diferentes línguas de trabalho. Tem uma dimensão sociolinguística, que consiste na identificação da função e significado nas variações linguísticas, e uma dimensão textual, que consiste na análise e compreensão dos vários elementos de um documento, na comparação de elementos culturais e na criação de documentos de acordo com as convenções retóricas e do género textual.)

	Nada relevante	2	3	4	Muito relevante
Competência intercultural	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor in-house, que relevância atribui à respetiva competência em extração de informação?

(Esta competência refere-se à identificação das necessidades de informação e documentação, bem como das estratégias de pesquisa para a sua obtenção. Abrange também a avaliação da fiabilidade das fontes e a utilização de ferramentas próprias e motores de busca.)

	Nada relevante	2	3	4	Muito relevante
Extração de informação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor in-house, que relevância atribui à respetiva competência temática?

(Esta competência refere-se ao domínio de processos de pesquisa de informação para melhor compreender os aspetos temáticos de um documento e também a métodos de aprofundamento do conhecimento em domínios especializados.)

	Nada relevante	2	3	4	Muito relevante
Competência temática	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor in-house, que relevância atribui à respetiva competência tecnológica?

(Esta competência refere-se à capacidade de utilizar software e métodos de adaptação a novas ferramentas e formatos.)

	Nada relevante	2	3	4	Muito relevante
Competência tecnológica	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor in-house, que relevância atribui à respetiva competência de produção de tradução?

(Esta competência refere-se à capacidade de criar uma tradução ou revisão adequada às necessidades do cliente e da situação.)

	Nada relevante	2	3	4	Muito relevante
Produção de tradução	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor in-house, que relevância atribui à respetiva competência interpessoal?

(Esta competência refere-se ao conhecimento da função social do tradutor, ao conhecimento do mercado, às técnicas de marketing e de negociação, ao esclarecimento dos requisitos e objetivos de todos os intervenientes, ao cumprimento de instruções e prazos, à organização de equipas e ao trabalho em equipa e à autoavaliação.)

	Nada relevante	2	3	4	Muito relevante
Competência interpessoal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Na sua empresa também utilizam tradutores cuja língua de chegada seja uma língua não materna? (L2)

Sim Não

<- Anterior Seguinte ->

44%

Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar ->

Continuarei mais tarde

8.- III. Processo de recrutamento - Tradutor in-house

Esta secção visa recolher informação sobre os processos de recrutamento da empresa para um tradutor in-house.

***O processo de seleção de um tradutor in-house inclui um teste específico para avaliar o candidato nas seguintes competências? (Por exemplo, um teste escrito de tradução com recursos online para avaliar a competência de tradução e extração de informação, uma entrevista para avaliar a competência interpessoal, etc. Para sua conveniência, pode consultar no ficheiro de referência anexado ao e-mail do questionário as definições das diferentes competências.)**

	Sim	Não
Língua(s) de partida	<input type="radio"/>	<input type="radio"/>
Língua(s) de chegada	<input type="radio"/>	<input type="radio"/>
Competência intercultural	<input type="radio"/>	<input type="radio"/>
Extração de informação	<input type="radio"/>	<input type="radio"/>
Competência temática	<input type="radio"/>	<input type="radio"/>
Competência tecnológica	<input type="radio"/>	<input type="radio"/>
Produção de tradução	<input type="radio"/>	<input type="radio"/>
Competência interpessoal	<input type="radio"/>	<input type="radio"/>

Use este campo para fornecer uma breve descrição do processo de testes e avaliação de competências (opcional)

0/4000

***Para a seleção de um tradutor in-house, que relevância atribui aos seguintes requisitos?**

	Nada relevante	2	3	4	Muito relevante
Experiência profissional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formação académica	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Membro de uma associação de tradutores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Certificação por associações de tradutores (ATA, IoL, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Carta de recomendação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recomendação direta de outros profissionais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<- Anterior

Seguinte ->

50%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

9.- III. Processo de recrutamento - Tradutor freelance

Esta secção visa recolher informação sobre os processos de recrutamento da empresa para um tradutor freelance.

***Escolha os métodos principais que utiliza para encontrar candidatos num processo de recrutamento de um tradutor freelance. Indique-os por ordem.**

	Método
Método 1	<input type="text" value="Escolha uma opção"/> <
Método 2	<input type="text" value="Escolha uma opção"/> <

Use este campo para fornecer informações adicionais sobre os métodos de recrutamento (opcional)

0/4000

<-Anterior

Seguinte->

56%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar -> Continuaréi mais tarde

10.- III. Processo de recrutamento - Tradutor freelance

Esta secção visa recolher informação sobre os processos de recrutamento da empresa para um tradutor freelance. Para sua conveniência, pode consultar no ficheiro de referência anexado ao e-mail do questionário as definições das diferentes competências.

*Para a seleção de um tradutor freelance, que relevância atribui à respetiva competência na(s) língua(s) de partida?

(Língua de origem ou língua-fonte são outras designações usadas para a língua de partida.)

	Nada relevante	2	3	4	Muito relevante
Língua(s) de partida	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor freelance, que relevância atribui à respetiva competência na(s) língua(s) de chegada?

(Língua de destino ou língua-alvo são outras designações usadas para a língua de chegada.)

	Nada relevante	2	3	4	Muito relevante
Língua(s) de chegada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor freelance, que relevância atribui à respetiva competência intercultural?

(Esta competência refere-se à capacidade de comparar e contrastar as práticas discursivas das diferentes línguas de trabalho. Tem uma dimensão sociolinguística, que consiste na identificação da função e significado nas variações linguísticas, e uma dimensão textual, que consiste na análise e compreensão dos vários elementos de um documento, na comparação de elementos culturais e na criação de documentos de acordo com as convenções retóricas e do género textual.)

	Nada relevante	2	3	4	Muito relevante
Competência intercultural	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor freelance, que relevância atribui à respetiva competência em extração de informação?

(Esta competência refere-se à identificação das necessidades de informação e documentação, bem como das estratégias de pesquisa para a sua obtenção. Abrange também a avaliação da fiabilidade das fontes e a utilização de ferramentas próprias e motores de busca.)

	Nada relevante	2	3	4	Muito relevante
Extração de informação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor freelance, que relevância atribui à respetiva competência temática?

(Esta competência refere-se ao domínio de processos de pesquisa de informação para melhor compreender os aspetos temáticos de um documento e também a métodos de aprofundamento do conhecimento em domínios especializados.)

	Nada relevante	2	3	4	Muito relevante
Competência temática	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor freelance, que relevância atribui à respetiva competência tecnológica?

(Esta competência refere-se à capacidade de utilizar software e métodos de adaptação a novas ferramentas e formatos.)

	Nada relevante	2	3	4	Muito relevante
Competência tecnológica	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor freelance, que relevância atribui à respetiva competência de produção de tradução?

(Esta competência refere-se à capacidade de criar uma tradução ou revisão adequada às necessidades do cliente e da situação.)

	Nada relevante	2	3	4	Muito relevante
Produção de tradução	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Para a seleção de um tradutor freelance, que relevância atribui à respetiva competência interpessoal?

(Esta competência refere-se ao conhecimento da função social do tradutor, ao conhecimento do mercado, às técnicas de marketing e de negociação, ao esclarecimento dos requisitos e objetivos de todos os intervenientes, ao cumprimento de instruções e prazos, à organização de equipas e ao trabalho em equipa e à autoavaliação.)

	Nada relevante	2	3	4	Muito relevante
Competência interpessoal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Na sua empresa também utilizam tradutores cuja língua de chegada seja uma língua não materna? (L2)

Sim Não

<- Anterior Seguinte ->

62%

11.- III. Processo de recrutamento - Tradutor freelance

Esta secção visa recolher informação sobre os processos de recrutamento da empresa para um tradutor freelance.

***O processo de seleção de um tradutor freelance inclui um teste específico para avaliar o candidato nas seguintes competências? (Por exemplo, um teste escrito de tradução com recursos online para avaliar a competência de tradução e extração de informação, uma entrevista para avaliar a competência interpessoal, etc. Para sua conveniência, pode consultar no ficheiro de referência anexado ao e-mail do questionário as definições das diferentes competências.)**

	Sim	Não
Língua(s) de partida	<input type="radio"/>	<input type="radio"/>
Língua(s) de chegada	<input type="radio"/>	<input type="radio"/>
Competência intercultural	<input type="radio"/>	<input type="radio"/>
Extração de informação	<input type="radio"/>	<input type="radio"/>
Competência temática	<input type="radio"/>	<input type="radio"/>
Competência tecnológica	<input type="radio"/>	<input type="radio"/>
Produção de tradução	<input type="radio"/>	<input type="radio"/>
Competência interpessoal	<input type="radio"/>	<input type="radio"/>

Use este campo para fornecer uma breve descrição do processo de testes e avaliação de competências (opcional)

0/4000

***Para a seleção de um tradutor freelance, que relevância atribui aos seguintes requisitos?**

	Nada relevante	2	3	4	Muito relevante
Experiência profissional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formação académica	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Membro de uma associação de tradutores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Certificação por associações de tradutores (ATA, IoL, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Carta de recomendação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recomendação direta de outros profissionais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<-Anterior
Seguinte->



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

12.- IV. Formação inicial e contínua - Tradutor in-house

Esta secção visa recolher informação sobre os planos de formação da empresa para tradutores in-house.

***Na sua empresa dão formação aos tradutores in-house?**

Sim Não

<-Anterior

Seguinte->

75%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

13.- IV. Formação inicial e contínua - Tradutor in-house (1)

Esta secção visa recolher informação sobre os planos de formação da empresa para tradutores in-house.

***Que volume de formação recebem os tradutores in-house nas diferentes áreas?**

	Nenhuma formação	2	3	4	Muita formação
Língua(s) de partida	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Língua(s) de chegada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competência intercultural	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Extração de informação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Temas técnicos especializados	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tecnologia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produção de tradução	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competência interpessoal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***Que volume de formação recebem os tradutores in-house nas diferentes componentes da área de tecnologia?**

	Nenhuma formação	2	3	4	Muita formação
Informática geral	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ferramentas CAT comerciais (Trados, MemoQ...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ferramentas CAT internas (não disponíveis no mercado)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tradução automática e pós-edição	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Localização	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Design gráfico	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Use este campo para fornecer informações adicionais sobre a formação dos tradutores na empresa (opcional)

0/4000

<- Anterior

Seguinte->

81%

Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

14.- IV. Formação inicial e contínua - Tradutor freelance

Esta secção visa recolher informação sobre os planos de formação da empresa para tradutores freelance.

***Na sua empresa dão formação aos tradutores freelance?**

Sim Não

<-Anterior Seguinte->

88%



Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

15.- IV. Formação inicial e contínua - Tradutor freelance (1)

Esta secção visa recolher informação sobre os planos de formação da empresa para tradutores freelance.

***Que volume de formação recebem os tradutores freelance nas diferentes áreas?**

	Nenhuma formação	2	3	4	Muita formação
Língua(s) de partida	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Língua(s) de chegada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competência intercultural	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Extração de informação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Temas técnicos especializados	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tecnologia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produção de tradução	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competência interpessoal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***Que volume de formação recebem os tradutores freelance nas diferentes componentes da área de tecnologia?**

	Nenhuma formação	2	3	4	Muita formação
Informática geral	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ferramentas CAT comerciais (Trados, MemoQ...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ferramentas CAT internas (não disponíveis no mercado)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tradução automática e pós-edição	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Localização	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Design gráfico	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Use este campo para fornecer informações adicionais sobre a formação dos tradutores na empresa (opcional)

0/4000

<- Anterior

Seguinte->

94%

Competências Sinalizadas e Avaliadas nos Processos de Recrutamento de Tradutores

Abandonar->

Continuarei mais tarde

16.- V. Agradecimento e sugestões

Obrigado!

O questionário está a chegar ao fim. Agradecemos a sua colaboração e o tempo despendido. Nos dois campos seguintes, de preenchimento opcional, poderá enviar os seus comentários sobre o questionário, bem como sugestões de melhoria ou temas de pesquisa. Muito obrigado!

Introduza aqui os seus comentários sobre o questionário

0/4000

Introduza aqui sugestões de melhoria ou temas de pesquisa

0/4000

<-Anterior

Fim->

100%