

Using Corpora in Translation Pedagogy



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Abstract In view of recent developments in applied linguistics and translation studies, this paper argues that translation pedagogy is now a broad and burgeoning area of transdisciplinary research and practice whose goal is to address questions concerning teaching methods, testing techniques and curriculum planning in language teaching as well as translator training. Starting from this inclusive stance, the paper firstly proposes to redraw James S. Holmes's outline of applied translation studies. Secondly, it provides a critical analytical overview of corpus use in pedagogical translation at the advanced levels of linguistic competence in language B, as described in the Companion Volume to the Common European Framework of Reference for Languages (CEFR) (Council of Europe 2020). Thirdly, it overviews exemplary corpus use in translator training. These two sub-domains of applied corpus-based translation studies are viewed through the lens of two major competence models that have been elaborated in Europe in recent years. So, corpus use in language teaching is illustrated in the light of the new descriptors of the CEFR (Council of Europe 2020). Corpus use in translator training is illustrated in the light of the new European Master's in Translation (EMT) competence framework for 2018–2024 (Toudic and Krause 2017). After an introduction that outlines the background to the study, our paper critically reviews a sample of novel corpus-based teaching methods, and reveals commonalities and differences as to the place and role of corpora in 21st century translation pedagogy. The paper concludes by offering some recommendations for future research and practice.

(Sara Laviosa is the author of Sects. 1 and 2 of this paper. Gaetano Falco is the author of Sects. 3 and 4).

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1 Introduction: Expanding Holmes's Vision for Translation Studies

In James S. Holmes's outline of his vision for translation studies, the major area of research in the applied branch of the discipline is translator training, that is the teaching of translating “in schools and courses to train professional translators” (1988: 77). This area of scholarly enquiry addresses questions concerning teaching methods, testing techniques and curriculum planning. The coordinated noun phrase “translator training and education” is also used in the literature to denote the same area of research (cf. Kelly and Martin 2020; Washbourne 2020). In this chapter, we use the original compound term, “translator training”. Holmes's configuration of applied translation studies presupposes that translator training and pedagogical translation “need to be carefully distinguished” (1988: 77). Also, it envisages that extensive and rigorous research aimed at assessing the effectiveness of translating as a technique in foreign-language teaching and a test of foreign-language acquisition be undertaken in a separate area, namely “translation policy”. The findings of these envisaged studies would enable translation scholars to give informed advice on “what part translating should play in the teaching and learning of foreign languages” (1988: 78).

Since the turn of the century, ethnographic, experimental and survey-based studies carried out by translation scholars and educational linguists worldwide have produced ample empirical evidence for the effectiveness of L2 translating as a teaching method and a means of assessing language proficiency at all levels of instruction (Laviosa 2020; Laviosa and González-Davies 2020). This growing body of transdisciplinary and interdisciplinary research is inspired by the tenets upheld by the so-called “multilingual turn”, an important paradigm shift that foregrounds “multilingualism, rather than monolingualism, as the new norm of applied linguistic and sociolinguistic analysis” (May 2014: 1). The multilingual turn is endorsed and promoted by the Council of Europe. Crucially, the CEFR Companion Volume with New Descriptors highlights the importance of mediating between individuals with no common language as one of the abilities that form part of plurilingual and pluricultural competence. These two aspects of plurilingualism are intimately interrelated and constitute the goal of modern languages education in the twenty-first century. Plurilingual individuals are able to call flexibly upon a single, interrelated, uneven and developing plurilinguistic repertoire that they combine with their general competences and various strategies to accomplish a host of communicative tasks involving intercultural interaction (Council of Europe 2020).

Mediation tasks, in particular, require that the user/learner is able to act as a social agent who creates bridges and helps to construct or convey meaning,

sometimes within the same language, and sometimes from one language to another (cross-linguistic mediation). The context can be social, pedagogic, cultural, linguistic or professional. Mediation involves the integration of receptive, productive and frequent interactive abilities. There are different types of mediation tasks, each requiring specific integrated abilities that are carefully described in the CEFR. These are (a) mediating a text (within the same language and between languages), (b) mediating concepts and (c) mediating communication. Mediating a text between language A (the learner's best language) and language B (the learner's new language) includes the following oral and written tasks:

- relaying specific information given in a particular section of an unabridged text;
- explaining data presented in graphs, diagrams or charts;
- processing a text, e.g. summarizing it;
- translating a text.

At the higher levels of linguistic proficiency (C1 and C2) the abilities required to translate a written text in writing, which is the focus of the present discussion, are as follows:

C1 Can translate into (language B) abstract texts on social, academic and professional subjects in his/her field written in (language A), successfully conveying evaluative aspects and arguments, including many of the implications associated with them, though some expressions may be over-influenced by the original.

C2 Can translate into (language B) technical material outside his/her field of specialization written in (language A), provided subject matter accuracy is checked by a specialist in the field concerned—(Council of Europe 2020: 103).

According to the competence model presented in the CEFR, translating a written text at C1 and C2 levels involves processing the source message and articulating it in the target language. The key functional abilities required to transfer meaning from one language to another are (a) comprehensibility of the translation, (b) adherence to the relevant norms in the target language and (c) capturing nuances in the original. Therefore, the CEFR fully legitimizes translation in language learning and teaching as a cross-linguistic mediation activity that plurilingual individuals can carry out in a personal, social, academic or professional context. Furthermore, the CEFR reappraises translating not just as an exercise in contrastive grammar, a means of achieving communicative competence or a test of students' knowledge of the target language but, most importantly, as a valuable skill in its own right. A competent plurilingual individual develops this skill in degree programmes where one or more languages are taught up to C1 or C2 level. One can readily detect a significant shift from the traditional view of translation *for* language teaching toward the emerging view of translation *in* language teaching. The latter concept draws on the principles of four major educational philosophies: technological, social reformist, humanistic and academic. As Guy Cook contends (2010: 109–112), from a technological perspective, in today's increasingly multilingual and multicultural societies, translation is a much-needed skill for personal, educational, social and professional reasons. From a social reformist perspective,

translation can promote liberal, humanist and democratic values, because it facilitates language and cultural encounters with an understanding of difference. From a humanistic educational perspective, students look upon translation as a form of bilingual instruction. From an academic perspective, translation fosters the study of linguistics.

Moreover, with regard to the widely held dichotomy between pedagogical and professional translation, the CEFR affirms:

“Translating a written text in writing” is by its very nature a more formal process than providing an impromptu oral translation. However, this CEFR descriptor scale is not intended to relate to the activities of professional translators or to their training. Indeed, translation competences are not addressed in the scale. Furthermore, professional translators, like professional interpreters, develop their competence through their career. [...] On the other hand, plurilingual users/learners [...] sometimes find themselves in a situation in which they are asked to provide a written translation of a text in their professional or personal context. Here they are being asked to reproduce the substantive message of the source text, rather than necessarily interpret the style and tone of the original into an appropriate style and tone in the translation, as a professional translator would be expected to do— (Council of Europe 2020: 102).

The distinction drawn by the CEFR between pedagogical and professional translating is subtle and lies, in our view, at the heart of the difference made in translation theory between translation conceived as transfer of meaning (consonant with the instrumental model) and translation viewed as an interpretive act (consonant with the hermeneutic model) (cf. Laviosa 2019; Venuti 2017). We argue that, in order to gain a proper understanding of the relationship between these two forms of mediated communication, i.e. educational translation on the one hand and professional translation on the other, we need to compare and contrast the competence model presented in the CEFR with the translation competences required of professional translators. To this end, it is useful to consider the model of professional translation competence presented in a document titled *European Master’s in Translation Competence Framework 2017* (Toudic and Krause 2017). The EMT is a network of Master’s level study programmes that was developed in 2009 by higher education institutions in partnership with the European Commission’s Directorate General for Translation (DGT). The *EMT Competence Framework 2017* has been drawn out in response to three main developments that have occurred in the provision of translation services in the last decade. These developments are (a) the impact of technology, (b) the continuing expansion of English as a lingua franca, and (c) the role of artificial intelligence and social media in communication. The new framework builds on the “Wheel of Competence”, which was designed in 2009 by the members of the EMT network (Gambier et al. 2009), and views translating as a process to meet individual, societal or institutional needs.

The aim of the *EMT Competence Framework 2017* is to consolidate and enhance the employability of graduates with Master’s degrees in translation throughout Europe. It considers translation a multi-faceted profession and recommends that translator training at Master’s degree level should equip students not only with a

deep understanding of all the processes taking place when conveying meaning from one language to another but also with the ability to perform and provide translation service in line with the highest professional and ethical standards. The framework defines five complementary areas of competence, all equally important:

- LANGUAGE AND CULTURE (TRANSCULTURAL AND SOCIOLINGUISTIC AWARENESS AND COMMUNICATIVE SKILLS)
- TRANSLATION (STRATEGIC, METHODOLOGICAL AND THEMATIC COMPETENCE)
- TECHNOLOGY (TOOLS AND APPLICATIONS)
- PERSONAL AND INTERPERSONAL
- SERVICE PROVISION

We will now expound on each competence area, in turn, highlighting the skills that a graduate with a B.A. Hons. or a Master's degree in modern languages will be able to build on in translator training at the postgraduate level. The competence area named LANGUAGE AND CULTURE includes all the general and language-specific linguistic, socio-linguistic, cultural and transcultural knowledge and skills that constitute the basis of advanced translation competence. The framework recommends that language A (the main target language) should be mastered at CEFR level C2 or with native or bilingual proficiency. The other working languages should be mastered at CEFR level C1 and above. A graduate with a B.A. Hons. or a Master's degree in modern languages will possess the prerequisites for being admitted to an EMT programme since he/she will have an excellent command of language A and will have achieved level C1 or level C2 in at least one other working language (i.e. language B, the main source language).

TRANSLATION competence should be understood in the broadest sense, encompassing not only the actual meaning transfer between two languages but also all the strategic, methodological and thematic skills that come into play before, during and after the transfer phase per se, from document analysis to final quality control procedures in domain-specific, media-specific and situation-specific types of translation. The latter include public service translation, interpreting, localization and audio-visual translation. Translation competence includes also the ability to use machine translation, the automatic conversion of text from one natural language to another (cf. Kenny 2020). A graduate in modern languages would have gained an adequate general understanding of the meaning transfer phase between languages as one of the many processes taking place in professional translating. Therefore, this knowledge and the associated key functional abilities that he/she will have acquired in one or more target languages at C1 or C2 level (comprehensibility, accuracy and fluency of the written target text) will be a valuable asset in translator training.

The other competence areas are specific to translation teaching in Master's degree programmes aimed at students who wish to pursue a professional career in translation. TECHNOLOGY includes all the knowledge and skills used to implement present and future technologies during the different phases of the translation process (cf. Olohan 2020). It also includes the basic knowledge of machine

Table 1 Technological knowledge and skills

<ul style="list-style-type: none"> • Use the most relevant IT applications, including the full range of office software, and adapt rapidly to new tools and IT resources
<ul style="list-style-type: none"> • Make effective use of search engines, corpus-based tools, text analysis tools and CAT tools
<ul style="list-style-type: none"> • Pre-process, process and manage files and other media/sources as part of the translation, e.g. video and multimedia files, handle web technologies
<ul style="list-style-type: none"> • Master the basics of MT and its impact on the translation process
<ul style="list-style-type: none"> • Assess the relevance of MT systems in a translation workflow and implement the appropriate MT system where relevant
<ul style="list-style-type: none"> • Apply other tools in support of language and translation technology, such as workflow management software

(Toudic and Krause 2017: 9)

translation and the ability to utilize it when needed. As we can see in Table 1, the ability to use computerized corpora as translation aids is an integral part of the area of competence devoted to technological tools and applications. In the Wheel of Competence designed in 2009 by the members of the EMT network (Gambier et al. 2009), this particular skill was a component of the information mining competence, which included knowing how to use tools and search engines effectively (e.g. terminology software, electronic corpora and electronic dictionaries).

The PERSONAL AND INTERPERSONAL area of competence includes all the so-called “soft skills” that hone graduate adaptability and employability, namely planning and managing time, stress and workload; complying with deadlines, instructions and specifications; use of social media; self-evaluation and collaborative learning. Finally, SERVICE PROVISION covers all the skills relating to the provision of language services in a professional context, from client awareness and negotiation to project management and quality assurance.

If we compare the CEFR and the EMT models, we can identify three core areas of competence, knowledge and skills that would have been acquired in modern languages degree programmes and would be valuable assets when undergoing translator training at the postgraduate level. These areas are:

- a general understanding of one of the processes involved in professional translating, namely the meaning transfer phase between the source and the target language;
- plurilingual and pluricultural competence and integrated receptive and productive communication skills as prerequisites for developing linguistic, cultural and translation skills at Master’s degree level;
- the ability to translate written texts on social, academic and professional subjects as an asset for honing the capacity to translate a broader range of texts in domain-specific, media-specific and situation-specific translation assignments.

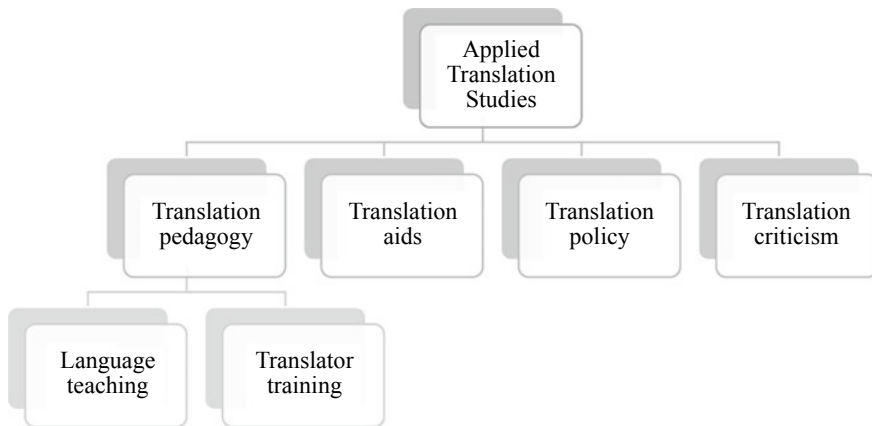


Fig. 1 Redrawing the outline of applied translation studies

On the basis of the comparative analysis presented here, translation pedagogy in higher education can be conceived as a continuum that starts with translation in language teaching and then progresses towards translator training. Going back to Holmes’s delineation of applied translation studies, we propose that teaching translation as cross-linguistic mediation in undergraduate or postgraduate degree programmes in modern languages and translator training in Master’s degree programmes would be considered offshoots of the pedagogic sub-branch of applied translation studies. We also propose that this research domain be re-named with the superordinate term “translation pedagogy” (see Fig. 1).

This new configuration of applied translation studies brings about far-reaching changes in the whole field of scholarship and beyond. Firstly, it fully recognizes the status of translation in language teaching as a research domain in its own right, rather than considering it merely a topic to be covered in translation policy research programmes. Secondly, the relocation of educational translation to its rightful place within the pedagogic sub-branch of the applications of translation studies widens the range of topics that can be explored in dedicated research projects aimed at investigating not only teaching approaches and methods but also testing techniques and curriculum design. Thirdly, in order to elaborate such research programmes, it is crucially important to engage in a constructive dialogue with relevant neighbouring fields, most notably second language acquisition studies (SLA), language-teaching methodology, languages for specific purposes (LSP), educational linguistics and philosophy of education.

It is within this new delineation of the pedagogic sub-branch of applied translation studies that we are going to examine the place and role of monolingual and bilingual corpora in translation pedagogy in Sects. 2 and 3 of our paper. But before we do this, it is worth reflecting on the impact that the relocation of the pedagogic translation may have on the research questions that translation policy will address in future. We envisage that the translation scholar working in this research area will

continue to give advice on what needs to be translated in a given socio-cultural situation as well as on what the social and economic status of the translator is and should be. Examples of salient topics that may be investigated by the policy scholar are the translation production in crowdsourcing environments such as Wikipedia (see McDonough Dolmaia 2020); the role of translation in promoting and preserving languages of lesser diffusion such as Welsh, Corsican and Scots (see Baer 2020); the relationship between translators and their work environment such as international publishing (see Kershaw 2020); the increasing visibility of translators and their redefinition as creators and re-creators of their texts (see Summers 2020).

With regard to the other two sub-branches of applied translation studies, we envisage that, like translation policy and translation pedagogy, they will maintain their individuality and visibility by virtue of which they will continue to engage in an intradisciplinary dialectical relationship with the other domains of applied, theoretical and descriptive translation research as well as forge interdisciplinary relationships with adjacent fields of study. For example, translation aids will interface with disciplines as varied as lexicography, terminology, LSP studies, computational linguistics and artificial intelligence. Translation criticism, which extends beyond translation quality assessment, will interface with comparative literary studies, reception studies, cultural studies, stylistics, publishing studies and book history. From an intradisciplinary perspective, translation aids and criticism will influence teaching methods and testing in both language teaching and translator training, and translation policy will influence curriculum design, particularly in postgraduate translator training programmes.

2 Corpora in Language Teaching

In this section, we survey a small but representative sample of corpus-based pedagogic procedures that language and translation teachers, who are also practising translators, explain and illustrate in two textbooks aimed at university students majoring in English (Stewart 2018) and Spanish (Carreres et al. 2018). The book we are going to consider first is *Italian to English Translation with Sketch Engine: A Guide to the Translation of Tourist Texts* published in 2018 and authored by Dominic Stewart (University of Trento). The intended target readership is composed of students of English (C1 level) with Italian as language A. The activities consist of authentic translation tasks assigned by the author during the teaching of the module *Lingua Inglese I* that forms part of the curriculum design of the first-year postgraduate degree in *Mediazione linguistica, turismo e culture*. The module comprises 15 lessons of 90 min each (Dominic Stewart, personal communication via email, 5–7 May 2020).

After an introductory chapter that outlines the translation principles underpinning the teaching method and describes the recommended language resources, the book is organized into 15 teaching units, each containing:

- a short abridged text of about 250 words to be translated for an envisaged international, non-specialist target readership consisting of travellers requiring clear and accurate information on tourist sites in Italy;
- a proposed translation sentence by sentence, which is based on successful renderings submitted by students;
- a discussion on unsuitable equivalents or appropriate alternatives arising from renderings submitted by the students.

The translations were carried out with the aid of large, general target-language corpora together with online language resources. The target-language corpora are the British National Corpus (BNC), containing 100 million words of British English offering a broad range of text types, 90% of written texts and 10% spoken, and the web-derived corpus ukWaC, containing 2 billion words retrieved from websites in the .uk Internet domain, and searched through the corpus software Sketch Engine. The additional online language resources are monolingual English dictionaries, learner's monolingual English dictionaries, monolingual Italian dictionaries and bilingual Italian-English dictionaries.

By way of example, we now illustrate how students benefitted from searching the BNC and ukWaC to solve translation problems arising at different levels of cross-linguistic analysis. After examining all the 15 lessons illustrated in the textbook, we grouped the main lexical and grammatical mismatches that students encountered when translating Italian tourist texts into English into four main categories:

- (I) Noun phrases containing toponyms.
- (II) Subject-specific terminology.
- (III) Polywords.
- (IV) Language-specific collocations:
 - i different node words with semantically equivalent collocates
 - ii different collocates with semantically equivalent node words.

With regard to noun groups with place-names, students searched the equivalent superordinate words in the BNC and ukWaC (e.g. island, lake, lagoon, mount, pass, plateau, stream and valley), and were able to identify the correct grammatical structure and word order of the following noun phrases, thus producing cohesive, coherent, comprehensible, fluent and accurate target language texts:

- l'altopiano di Brentonico → *the Brentonico Plateau*
- l'altopiano di Malga Fanta → *the Malga Fanta Plateau*
- l'isola di Barbana → *the island of Barbana / the Isle of Barbana / Barbana Island*
- il lago Pra de Stua → *Lake Pra de Stua*
- la laguna di Grado → *the lagoon of Grado / Grado's Lagoon*
- il monte Baldo → *Mount Baldo*
- il passo di Fittanze della Sega → *the pass of Fittanze della Sega*
- il passo di Xomo → *the Xomo Pass*

- il torrente Brasa → *the Brasa stream*
- il torrente Caglieron → *the Caglieron stream*
- la valle dell'Adige/la vallata dell'Adige → *the Adige Valley / Adige Valley*

The frequent use of terms belonging to specialized fields of knowledge such as history, military history, geography, history of art, religion, architecture, gastronomy, transport, and arts and crafts is a feature of the language of tourism. As Maria Vittoria Calvi observes in connection with the discursive practices that characterize the description and promotion of tourist sites,

Sul piano lessicale, si evidenzia l'uso frequente di unità terminologiche *mutuate* da altri settori correlati (storia dell'arte, geografia, gastronomia, ecc.) e solitamente non risemantizzate (Calvi 2012: 21, original emphasis).

By searching the BNC students were able to identify accurate and fluent equivalents of the following historical terms and expressions:

- il primo conflitto mondiale → *the First World War / World War I*
- l'ultima Guerra → *the Second World War / World War II*
- il dopoguerra → *the end of World War II*

Similarly, with the aid of the BNC and monolingual learner's dictionaries, students discovered several suitable equivalents for the geographical terms *salita* and *gobba*:

- siamo a 2/3 della salita detta della Polsa → *You are now two-thirds of the way up the ascent/climb/rise known as the Polsa/called Polsa*
- poco sotto la gobba del Cornetto, m 1543 → *below the hillock/hummock/hump/bump/mound/knoll Gobba del Cornetto, 1543 m*

Furthermore, a simple query search of the BNC and ukWaC revealed these renderings of the Italian name of the religious order founded by St. Francis of Assisi in 1209:

- *frati francescani minori* → *Franciscan friars / Franciscan Friars / Franciscan monks*

Polywords are short lexical phrases that allow no variability and are continuous (cf. Nattinger and De Carrico 1992). By searching ukWaC, students identified the following equivalents in the order of preference based on the frequency of occurrence:

- secondo la tradizione, (non-restrictive appositive set off by a comma) → *tradition has it that* (261) / *according to tradition*, (non-restrictive appositive set off by a comma) (202) / *by tradition*, (non-restrictive appositive set off by a comma) (196) / *tradition holds that* (24)
- conosciuta in tutto il mondo → *recognised worldwide* (167) / *known worldwide* (161) / *famous worldwide* (54) / *recognized worldwide* (49) / *worldwide known* (14) / *worldwide famous* (8) / *worldwide recognised* (5) / *worldwide recognized* (2)
- a ricordo di → *in memory of* (6,121) / *as a memorial of* (78)

As translators and language and translation teachers know very well, collocation does not always travel across languages and cultures, hence one cannot “assume that semantic equivalents across languages have analogous collocational networks” (Stewart 2018: 11). Large general corpora in the target language can aid learners to investigate thoroughly this aspect of language use. We offer two examples of language-specific collocations examined in the textbook. The first regards the adjective *panoramico* and the English equivalent *panoramic*. While *panoramico* collocates with the node word *scorcio*, often in the plural form, as in *scorci panoramici*, the literal translation *panoramic glimpses* occurs only twice in ukWaC and does not occur in the BNC. Instead, the collocation *panoramic view(s)* is recorded in monolingual dictionaries and is very frequent in both corpora. Therefore, students realized that a comprehensible, accurate and fluent translation of the original collocation *scorci panoramici* is *panoramic views*.

The second example concerns the different collocates of the semantically equivalent node words *parete di roccia* and *rock face*. In the source text, *parete di roccia* occurs with the attributive adjective *impraticabile*, which, when referring to places, means “che non si può percorrere” (that cannot be crossed or run through/ across) (Vocabolario della Lingua Italiana di Nicola Zingarelli). However, the equivalent attributive adjective *impracticable* means “it is impossible to do in an effective way” (Cambridge Advanced Learner’s Dictionary) and collocates with abstract nouns such as *ideas*, *proposals* or *suggestions*. Indeed, by searching the BNC and ukWaC super-sensed corpus using the Concordance function of Sketch Engine at the time of writing this paper, the following frequencies are found:

	Impractical ideas	Impractical proposals	Impractical suggestions
BNC	0	2	0
ukWaC super-sensed	1	1	1

A word sketch of the adjective *arduous* (suggested by the teacher) revealed a set of node words belonging to the same semantic field of natural scenery that *rock face* belongs to, namely *path*, *climb*, *descent* and *terrain*. At the end of this careful search, where the teacher guided as a facilitator of the learning process, the students reached a consensus and rendered the original collocation *una impraticabile parete di roccia* with *an arduous rock face*. The following are some of the findings of the usage frequency of *arduous rock face* at the time of writing this paper:

	Arduous rock face
BNC	0
ukWaC super-sensed	0
English Web 2015	0
Google	1 (with a metaphorical meaning)

Therefore, the English rendition of *an arduous rock face* can be considered a good example of innovative collocation in English through analogy. Yet, this collocation is still very infrequent. It is also not quite accurate because *arduous* means “difficult, needing a lot of effort and energy” (Cambridge Advanced Learner’s Dictionary). An accurate translation equivalent of the attributive adjective *impraticabile* is *impassable*, as recorded in English-Italian bilingual dictionaries. A word sketch of *impassable* in the BNC shows that it collocates with a variety of nouns belonging to the semantic field of natural scenery, e.g. *morass, landslide, rapids, dams, cliffs, country lanes*. In the English Web 2015 corpus, *impassable* collocates with nouns as varied as *terrain, ravine(s), swamp(s), thickets, crevasse (s), gorge(s), mountains, waterfall(s), torrent(s), canyon(s), peaks, forest(s) and woods*. But *rock face* is not included in the long list of nouns modified by *impassable*. A Google search conducted at the time of writing of this paper reveals 51 occurrences of *an impassable rock face*, all referring to mountain climbing. The example of cross-linguistic mismatches at the level of collocation we have examined here highlights the importance of using multiple online learning resources when translating texts written in a subject-specific field such as nature-based tourism in alpine areas.

Summing up, when translating tourist texts with the aid of corpora, students worked individually and collaboratively in the language laboratory and engaged in group discussions guided by the teacher. They were able to solve a variety of problems arising from lexical and grammatical discrepancies between the source and the target language. In doing so, they became aware of the stylistic norms of the target language in the specific field of tourism, and, in most cases, they were capable of producing intelligible, accurate and fluent translations. They also acquired transferable technological skills that could be valuable assets if they wished to undertake translator training with a view to pursuing a professional career in translation. However, students were never encouraged to use Free Online Machine Translation (FOMT) engines such as Google Translate, despite empirical evidence showing the increasing use of these computer-assisted translation tools for various language learning tasks such as reading, writing and grammar assignments (see Enriquez Raido et al. 2020).

The second book we are going to overview is *Mundos en palabras: Learning Advanced Spanish through Translation* published in 2018 and authored by Ángeles Carreres and María Noriega-Sánchez (University of Cambridge, UK) and Carme Calduch (Queen Mary University of London). The intended target readership consists of advanced undergraduate students of Spanish (C1 level) with English as language A. The aim of the book is to develop cross-linguistic and cross-cultural awareness as well as foster the ability to translate a wide range of authentic texts from English to Spanish. The pedagogic approach adopted is task-based language learning and the activities are designed around two key tenets, i.e. translation is conceived as a form of mediated communication and learning as a collaboration among peers and between students and the teacher. This stance is in line with the approach adopted by the CEFR, where mediation “focuses on the role of language in processes like creating the space and conditions for communicating and/or

learning, collaborating to construct new meaning, encouraging others to construct or understand new meaning, and passing on new information in an appropriate form” (Council of Europe 2020: 90).

The book is divided into 12 chapters. The first two chapters expound on the concept of translation underpinning the pedagogic approach adopted in the coursebook and introduce a number of key concepts, such as translation equivalence, translation strategy and translation competence, among others. Chapter 3 deals with the use of lexicographical and terminological resources and tools that students need when undertaking translation tasks either in class or by distance learning. The remainder of the coursebook presents authentic translation activities that focus on text types as varied as recipes, fiction, poetry, humour, theatre, advertising and audiovisual texts. The last chapter is devoted to the translation of language varieties such as Spanglish. The companion website contains (a) complementary exercises that require the support of online language learning resources, (b) additional activities, (c) downloadable learning materials and (d) suggested answers to most exercises. The latter is meant to be pointers for reflection and self-evaluation.

Corpora are introduced in a dedicated section of Chap. 3 entitled, “Los corpus lingüísticos”. The authors first describe the main features and uses (language learning, acquisition of subject-specific terminology and professional translating) of the general corpora of the Real Academia Española. Then, they refer students to the activities contained in the companion website. The pedagogic objective is threefold, i.e. acquire practical knowledge of two corpora, in particular, Corpus del Español Actual (CREA) and Corpus de Diacrónico del Español (CORDE), develop the ability to use them autonomously when needed and reflect on their usefulness for language learning and translating. By way of example, one of the exercises in the companion website focuses on collocation and asks students to search the polysemic verb *echar* in a subcorpus of CREA that represents periodicals published in Colombia. After retrieving the first set of KWIC concordance lines, students look for the collocational patterns associated with three different meanings of the transitive verb *echar*, i.e. *deshacer algo* (defeat); *reprochar* (reproach); *culpar* (blame), and then copy in their worksheet the actual verbal context in which *echar* conveys each of the above meanings. After completing all the corpus-based activities provided in the companion website, students carry out the following reflection task:

Actividad 13.

Tras haberte familiarizado con las búsquedas en corpus con las actividades de la Plataforma Digital, anota tres casos en los que crees que los corpus te pueden ayudar en tus traducciones y en tu aprendizaje del español (Carreres et al. 2018: 83).

As a concluding remark, we can say that Stewart’s and Carreres et al.’s coursebooks make a valid contribution to fulfilling the long-term prediction made by Guy Cook at the end of his landmark work on educational translation:

If the benefits of TILT [Translation in Language Teaching] were to be recognized in theory as well as practice by those in positions of power and influence as well as by rank-and-file teachers, it would have positive repercussions, and would initiate activity and innovation in

many areas beyond classroom practice itself. New materials would need to be written, new tests designed, and new elements introduced into teacher education (Cook 2010: 156).

With regard to the use of corpora, Stewart's textbook, in particular, focuses on two of the three areas of convergence between teaching and language corpora earmarked by Geoffrey Leech (1997, quoted in McEnery et al. 2006: 97). These areas are "teaching to exploit" and "exploiting to teach". The former means providing students with technical expertise so that they can utilize corpora for their own learning purposes. The latter means using a corpus-based, data-driven learning approach to teaching language and linguistics courses. However, the third area, "teaching about", is beyond the scope of both books, since it refers to the teaching of corpus linguistics as an academic subject in curricula for linguistics and language-related degree programmes at undergraduate and postgraduate levels.

3 Corpora in Translator Training

In this section, we offer an overview of a representative sample of recent studies concerning the integration of corpora in translator training as a result of the spread of technological tools and expertise in the translation profession (Wong Shuk Man 2015). Indeed, as has been advocated by many scholars, there is a need for designing syllabi which, besides providing students with language and communication skills and tools, include modules intended to develop technological competence (EMT Annual Report 2019; Gouadec 2007; Samson 2005; Sikora 2014; Pym 2012; Torr s-Sim n and Pym 2019).

Among them, Daniel Gouadec (2007) contends that a well-trained translator should possess appropriate technological knowledge and skills in addition to knowledge of terminology management systems for translation purposes, good documentation and research skills, as well as familiarity with technical and scientific writing. Technological knowledge and skills entail "familiarity with database management systems and electronic data management (XML/XSL/SML), proficiency at using translation memory systems, knowledge of proof-reading, revision and post-editing techniques, knowledge of technologies and software used in the processes of document production and management" (Gouadec 2007: 331–332).

It is worth pointing out that we use the terms "competence", "skills" and "knowledge" in accordance with the definitions that are provided in *The European Qualifications Framework for Lifelong Learning (EQF)*, and are also upheld in the *EMT Competence Framework 2017*. The definitions are as follows:

competence "means the proven ability to use knowledge, skills and personal, social and/ or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy".

skills "means the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as

cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)”.

knowledge “means the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual” (European Commission Education and Culture 2008).

Therefore, competence in translation technology is not just a matter of automatic work, it involves critical thinking, creativity and methodology. Disregarding this key aspect of translation technology implied widening the gap between theory and practice, which has always been one of the conundrums of translation studies. In this regard, Lynne Bowker warns against the “silozation” of technological tools as in many translator training programmes, where

the tools are only seen and used in ‘core’ courses—i.e. courses with a specific focus on technology—rather than being integrated across a range of applied courses in the translator training program. The resulting gap between theory and practice does not provide students with an accurate picture of how they are likely to work—and in fact may be expected or required to work—in many professional contexts. To truly learn how tools fit into the translation process, technology-related tasks must be contextualized rather than severed from realistic experience (Bowker 2015: 97).

In fact, the word *technology* derives from two ancient Greek words, *τέχνη* and *λόγος* transliterated as *téchne* and *lógos*, respectively. *Téchne* means art, skill, craft, and especially the principles or methods employed in making something or attaining an objective. *Lógos* means speech, word and the utterance by which inward thought is expressed. So, literally, *technology* means words or discourse about the principles and methods used in making something or achieving a goal. Only lately, the word *technology* has come to mean something narrower than the original sense. In line with its etymology, we view technology holistically as a system, a process, forms of knowledge and new discoveries, as well as a set of tools that involve continuous advancement.¹ In the context of translator training, we regard “technological competence” as the knowledge of various tools, in particular electronic tools, e.g. word processors, computer-aided translation (CAT) tools, the Internet, terminological databases, corpora, as well as the skills needed to use these tools correctly and appropriately, together with the systematic use of these tools in project management and project workflow. Ideally, a successful translator training course should include all these elements. This chapter focuses on the role of corpora, including web-derived corpora and pre-constructed and do-it-yourself (DIY) corpora, available both offline and online, as well as other “associated processing tools such as concordancers [that] may find a place in a documentation course on a translator education program” because learning how to design and compile DIY corpora would enhance trainees’ critical thinking, evaluation and decision-making skills (Bowker 2015: 91).

¹<https://web.engr.oregonstate.edu/~funkk/Technology/technology.html>.

Moving on to examining recent pedagogical research, translator training generally adopts a socio-constructivist approach, which posits that learning how to translate results from the student's decision-making process. Research has shown that a learner-centred approach combined with the use of monolingual source-language and target-language corpora, as well as bi/multilingual comparable and parallel corpora can have beneficial effects. Furthermore, over the last years, translator training has been boosted by the incorporation of modules on the use of technological tools. CAT tools, machine translation, translation memories, collaborative translation platforms have been introduced in many Master's degree programmes on translation studies across the world.

Consequently, there has been a considerable growth in the publication of handbooks, papers, guidelines for academic curriculum design and reports on translator training experiences in the classroom, not to speak of conferences, seminars and roundtables. At the same time, researchers, scholars, professionals, international institutions and stakeholders from the professional world of translation and interpreting have promoted projects (OPTIMALE, EMT, MUST, MELLANGE, PACTE) and meetings in order to pool together their own experiences. What emerges from this heterogeneous "universe" is the shared view that some changes are needed in terms of translator training approaches; in particular, the need for a shift towards learner-generated training, where students are not simply consumers but the protagonists of their own learning experience.

With regard to corpus-based pedagogic approaches, Cécile Frérot (2016) offers a comprehensive review of research into the usefulness of corpora and corpus tools. In particular, following Alison Beeby et al. (2009), Frérot distinguishes between two teaching styles that can be subsumed under a general socio-constructivist orientation. These styles are "corpus use for learning to translate" and "learning corpus use to translate". In the former, teachers design corpus-based translation-related tasks so that students focus on a particular translation issue and analyse a given set of preselected data. In the latter, students play a central role as they are involved in designing and compiling DIY corpora, as well as identifying strategies and tools to search the corpora by themselves. In so doing, students learn how to use corpora efficiently and strategically to solve real-life translation problems. Frérot also highlights the added value of corpora for enhancing the quality of students' specialized translation, especially with regard to terminology, collocational patterns, genre and discourse.

Research into the use of corpora, including different types of software for compiling and analysing pre-constructed and/or DIY corpora, has grown steadily in recent years in a wide array of academic fields as well as in translator training, especially in Master's degree programmes in specialized translation. This growth has been boosted by the increased availability of free online corpora, concordancers, search engines and other platforms, which enable trainees to compile their own corpora or search ready-made ones. Furthermore, parallel, multilingual websites, such as the European Commission's system of multilingual display, allow users, including translator trainees, to manage a large collection of parallel electronic texts on various subject-specific domains covered by the European

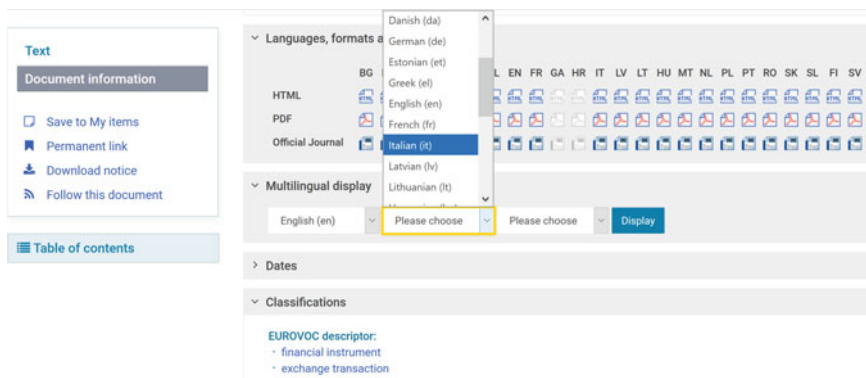


Fig. 2 European Commission Multilingual Display

(2) | The Eurosystem has revised its disclosure policy for securities transactions with a view to enhance further the transparency of the financial statements. As part of the revised policy, securities that previously qualified as financial fixed assets should be reclassified from the **balance sheet item** 'Other financial assets' to the appropriate item under the heading 'asset' depending on the origin of the issuer, the currency denomination and on whether the securities are held-to-maturity. Moreover, all financial instruments that are part of an earmarked portfolio should be included under the item 'Other financial assets'.

(2) | L'Eurosistema ha rivisto la propria politica concernente l'informativa per le operazioni in titoli nell'intento di accrescere ulteriormente la trasparenza dei rendiconti finanziari. Relativamente alla politica oggetto di revisione, i titoli previamente qualificati come immobilizzazioni finanziarie dovrebbero essere riclassificati e spostati dalla **voce di bilancio** «altre attività finanziarie» a quella appropriata sotto il titolo «attivo» a seconda dell'origine dell'emittente, della valuta di denominazione se sono titoli detenuti fino a scadenza. Inoltre, tutti gli strumenti finanziari che sono parti di un portafoglio a destinazione specifica devono essere inclusi sotto la voce «altre attività finanziarie».

(2) | O Eurosistema reviu a sua política de divulgação das operações sobre títulos tendo em vista aumentar a transparência das demonstrações financeiras. Como parte da política revista, títulos anteriormente qualificados como activos financeiros imobilizados deverão ser reclassificados, passando da **rubrica do balanço** «Outros activos financeiros» para a rubrica do activo mais apropriada, consoante a origem do emissor, a denominação da moeda e o facto de os títulos serem ou não detidos até ao vencimento. Além disso, todos os instrumentos financeiros que fazem parte de carteiras especiais devem ser incluídos na rubrica «Outros activos financeiros».

Fig. 3 *Balance sheet item* and its translations into Italian (*voce di bilancio*) and Portuguese (*rubrica do balanço*)

Commission Directorate-General for Translation, e.g. economics, commerce, customs laws, health, employment, IT, tourism, immigration and many others. The platform displays queries in the source language and one or two target languages out of the 24 EU official languages (see Figs. 2 and 3).

The European Commission Directorate-General for Translation has developed various tools, such as terminological databases (IATE, EuroVoc) and machine translation engines (eTranslation), to support their in-house translators as well as trainees who attend translation internships at the Directorate-Generals (DGs) of the European Commission. EU documents are an important pedagogical aid whenever students need to be trained to design and compile DIY parallel corpora for language and translation learning. Moreover, over the last two decades, there has been increasing interest in designing web-derived corpora which are domain-specific and very large in size. Currently, we have corpora consisting of billions of words, e.g. iWeb (Intelligent Web-based Corpora), or NOW (News On the Web), which are representative of different varieties of the English language.² Another source of

²Both corpora have been designed, compiled and are continuously updated by Mike Davies.

“corpus colossal”,³ in terms of size, language variety and subject differentiation is Sketch Engine, which collects a number of corpora in different natural languages, including corpora of parallel texts, such as the European Commission DGT, Eur-lex, Europarl, OPUS, the Bible and the Quran corpora. Notably, some of them are also specialized. Therefore, they are an important source of translation data and a valuable resource for creating bilingual glossaries of specialized terms.

Sketch Engine, in particular, incorporates the BootCat toolkit,

a suite of perl programs implementing an iterative procedure to bootstrap specialized corpora and terms from the web, requiring only a small list of “seeds” (terms that are expected to be typical of the domain of interest) as input. The basic idea is very simple: Build a corpus by automatically searching Google for a small set of seed terms; extract new (single-word) terms from this corpus; use the latter to build a new corpus via a new set of automated Google queries; extract new terms/seeds from this corpus and so forth. The final corpus and unigram term list are then used to build a list of multi-word terms. These are sequences of words that must satisfy a set of constraints on their structure, frequency and distribution (Baroni and Bernardini 2004).

Actually, the operation described here can be regarded as an interesting case of the principles of Frame Semantics at work, namely, the continuous expansion of the semantic frames starting from a very limited number of seed terms and the concepts around them by repeatedly retrieving the related data on Google to make the original conceptual frames grow as the body of the encyclopaedic knowledge expands. By “encyclopaedic knowledge” we mean the whole of linguistic and non-linguistic knowledge to which a word or a group of words potentially provide access. Unlike “dictionary knowledge”, which is merely concerned with word meaning, i.e. with words “as neatly packaged bundles of meaning”, “encyclopaedic knowledge” involves knowledge from a pragmatic perspective, i.e. knowledge of word use in the specific context of a conceptual domain (Evans and Green 2006: 208).

The iterative procedure illustrated by Baroni and Bernardini (2004) soon found other applications in the field of translation practice, education and training. Sara Castagnoli (2006), for example, trained her students attending the School for Interpreters and Translators of the University of Bologna, Forlì, Italy, to use the BootCat toolkit in order to generate corpora automatically and autonomously. One of the two modules taught in her course introduced students to corpus annotation, POS tagging and collocation extraction in order that they could “consider terminological work both as an autonomous discipline and as a component of the translation process” (Castagnoli 2006: 162). Castagnoli’s is just one of many pedagogic practices that demonstrate how corpora can find important applications in the context of translator training.

Similarly, working with a group of second-year students attending the second-year MA programme in specialized translation at the Cologne University of Applied Sciences (Institute of Translation and Multilingual Communication), Ralph

³The expression was coined by *The Economist* (January 20, 2005).

Krüger (2012) designed an introductory course on the key aspects of real-life translation projects. One major task included the compilation of DIY corpora using the Internet. Students learnt to use tools such as WebCorp Live, and apply strategies for querying the Internet itself as a macro-corpus. Significantly,

The students' feedback on the use of corpora was largely positive. They particularly appreciated the availability of a high-quality translation corpus which provided immediate solutions to various translation problems. The parallel-text corpus was, for the most part, not used as an independent resource. The students mainly used it as a "back-up" corpus to check whether the terminology and structural patterns found in the target texts of the translation corpus were also present in original target-language texts (Krüger 2012: 522).

Moreover, Ana Frankenberg-Garcia (2015) reports on a training experience with a multilingual group of 13 students attending an MA in Translation at the University of Surrey during the academic year 2013/14. One module in her course focused on the hands-on use of corpora for translation practice. The syllabus was not meant to provide students with theoretical insights into corpus linguistics and translation studies; it rather focused on the practical use of corpora for translation purposes. Using WebBootCat, included in Sketch Engine, students crawled the web in order to compile DIY specialized corpora that they could use for translations assigned both in the classroom and for homework (Frankenberg-Garcia 2015: 357–358).

In her paper, Clara Inés López Rodríguez (2016) presents the results of a three-year research project carried out within the framework of CombiMed: combinatory lexis in Medicine: cognition, text and context (FFI2014-51,899-R), funded by the Spanish Ministry of Economy and Competitiveness, and the teaching innovation action Tradusaluda: audiovisual resources for the promotion of health in Europe: accessible subtitling and translation (PID 14–39), funded by the University of Granada. In particular, the article describes how quality corpora were employed in a course of scientific and technical translation from English to Spanish, with a special focus on terminological variation as evidence of language creativity. Creativity is seen as an important aspect in the cognitive processes involved in translation since it promotes the coinage of neologisms as well as the attribution of new meanings to existing words, the metaphorization of general nouns and the re-organization of syntax. These phenomena were investigated in the context of technical and scientific translation. More specifically, the students taking part in the project were trained to compile DIY monolingual corpora in English and Spanish as well as parallel corpora with the help of various online platforms, e.g. Sketch Engine, WebCorp,⁴ Aranea Project No Sketch Engine,⁵ Exemplar Words in context,⁶ BNC,⁷ Corpus of Global Web-Based English (GloWbE),⁸ CREA (Corpus de

⁴<http://www.webcorp.org.uk>.

⁵<http://ucts.uniba.sk>.

⁶<http://www.springerexemplar.com/>.

⁷<http://www.natcorp.ox.ac.uk/>

⁸<https://www.english-corpora.org/glowbe/>.

Referencia del Español Actual), amongst others. Again, this experience underscores the central role of learners in the translation training process.

In a similar vein, Anne Lise Laursen and Ismael Arinas Pellón (2012) present the results of a concurrent course in specialized translation between Spanish and Danish. In particular, using two sets of parallel texts, i.e. the EU 4th and 7th Directive (i.e. EU Financial Reporting Legislation), and the International Accounting Standards (IAS), available both in the Spanish and Danish versions, students were trained to retrieve terminological equivalents in the accounting field in Spanish and Danish, using the AntConc concordance. As a result, trainees acquired technological skills as well as linguistic and thematic competence, i.e. the ability to identify stylistic, genre-related, terminological features in the two languages. Finally, Hind Alotaibi's (2017) study provides evidence of the attention that Arabic countries are giving to corpus-driven translation training. Alotaibi reports on the findings of a project carried out with a group of students at the College of Languages and Translation, King Sand University. The students were involved in the compilation of a 10-million word Arabic-English parallel corpus, consisting of texts from different domains, including specialized ones, such as medicine, law and science.

4 Concluding Remarks

Within the outline of applied translation studies that we have redrawn from a plurilingual perspective on language education, we can reasonably predict that translating with the aid of corpora will play a key role in stimulating the creation of novel multilingual learning resources and materials as well as the design of new teaching procedures and testing techniques in language learning and translator training, given the growing impact of technology on present-day electronically mediated communication, the study of languages and the language industry at large (see Crystal 2018: 452–476). It is fair to say that the use of corpora in translation-oriented language education is still in its infancy. There is a long way to go before corpora are systematically integrated into language teaching at the university level. In order to achieve this goal, we need to engage in empirical research aimed at assessing the benefits of corpus-aided translation for language learning. And to that end, we need to promote closer cooperation between educational linguists and translation studies scholars (see Laviosa and González-Davies 2020).

In sharp contrast, the use of corpora in translator training is growing rapidly. Recent innovative experimental research undertaken in South China Normal University, which shows the distinct advantages of translating with the aid of the parallel corpus of the Hong Kong Parallel *cum* Comparable Corpus (Liu 2020), is highly promising and offers an excellent model for future longitudinal studies that may be carried out with other language combinations and in other educational settings. The widespread scholarly interest in corpus-assisted translation teaching reflects the significant changes that are taking place in education, in general, and in

translator training, in particular. The incorporation of new Information Technologies in education has reshaped the contents from the old media to the new digital ones, a phenomenon known as “remediation”, a term coined by Bolter and Grusin (1996). Remediation entails a form of information literacy, consisting of various competences, such as “computer literacy, critical thinking and information, skills, Information Technology (IT) literacy, learning how to learn (or lifelong learning) literacies, and library or digital media literacies” (Loucky 2008: 281–282). This technological turn in training reveals a shift from a static way of teaching, largely based on a transmissionist, teacher-centred approach, to a more dynamic, proactive way of learning, which involves a learner-generated approach, in that students “become responsible for their own learning and the learning of others. The teacher is no more the authority who determines what is studied and assesses the quality of students’ work” (Atan 2012: 2).

Technology also favours collaborative work, information exchange, exploratory attitudes and inquiry-based learning: these activities take place in an authentic, real-world context (Sessom 2008). Crucially, these are the same tenets underpinning Donald Kiraly’s socio-constructivist approach to translator training, whereby “individuals have no choice but to create or construct meanings and knowledge through participation in the interpersonal, intersubjective interaction” (Kiraly 2000: 4). Hence, students are active builders of their knowledge, they monitor and are responsible for their education process. Also, they do not act in isolation but are part of a community in which each individual is involved in a collaborative process. This pedagogic approach entails a change in the power relations between teachers and students. Students are empowered to become decisive actors in designing and planning translation activities and syllabi as well as corpus use.

The learners’ design and construction of corpora, especially of specialized corpora for translation purposes, contribute to creating and enhancing their “encyclopaedic knowledge” (Evans and Green 2006). This term refers to the meaningful knowledge of specialized domains and students’ awareness not only of terms, as isolated units, but also of the textual, social, cultural and pragmatic context in which these terms are used. Even though many studies of corpora in translator training are not explicitly based on cognitive linguistics, we cannot disregard the cognitive shift that is occurring in corpus-based and corpus-driven translation teaching. A case in point is Elina Symseridou’s method of collecting corpora from the web through Sketch Engine with the aim to train students in healthcare translation. As she observes, “the adoption of a corpus-based teaching methodology allows for the inclusion of more specialised texts in the curriculum, even if the teacher is not acquainted with a discipline, as well as the creation of a collaborative learning environment” (Symseridou 2018: 73). Finally, and looking to the future, recent research indicates that corpus-based approaches to translator training can be further improved by incorporating other methodologies. As shown by Gaetano Falco (2014), the integration of concept maps into corpus-driven

teaching methods can contribute to enhancing the trainees' cognitive processes, boosting their creativity and awareness of specialized domains, thus enabling them to acquire encyclopaedic knowledge and, accordingly, perform translation tasks successfully.

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