

# Metaphorical Phraseologies in a Learner Corpus: Investigating Translations from Brazilian Portuguese to English

*Fraseologismos metafóricos em um corpus de aprendizes: investigando traduções do português brasileiro para o inglês*

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**Abstract:** This paper discusses the results of a study that aimed to examine whether Brazilian learners face difficulties in translating metaphorical phraseologies into English from a lexical, semantic, and cognitive perspective. The study drew on four main fields of research: metaphor, translation, phraseology, and corpus linguistics. We applied the conceptual metaphor theory and the cognitive-discourse perspective to identify the conceptual and linguistic metaphors in the corpus under study. Based on the cognitive translation hypothesis, mapping conditions were examined in the source and target languages. Additionally, grounded on corpus linguistics and phraseology, we evaluated the conventionality of the translated phraseologies in terms of their lexicogrammar, semantic, metaphor, and contextual features using a co-occurrence method and concordance line analysis. The research findings, along with related empirical studies, are presented and discussed. A total of 21 learners translated 81 phraseologies, resulting in 1202 translation solutions. The analysis showed that 86% of the translations represented metaphors with similar mapping conditions. However, 42% of them were understood as less or non-conventional metaphorical phraseologies. The findings suggest that the linguistic aspect posed more of a challenge in the translations rather than the conceptual one. Learners



retained the conceptual metaphor in the target language, but they often used unusual lexical choices in English due to the influence of their mother tongue's cognitive-linguistic system.

**Keywords:** metaphor; metaphorical phraseology; translation; learner corpus.

**Resumo:** Este artigo discute os resultados de um estudo que objetivou examinar se aprendizes brasileiros têm dificuldades ao traduzir fraseologismos metafóricos para o inglês, a partir de uma perspectiva léxico-sêmica e cognitiva. A pesquisa se ancorou em quatro principais áreas: metáfora, tradução, fraseologia e linguística de corpus. A teoria da metáfora conceitual e a perspectiva cognitivo-discursiva foram empregadas para identificar as metáforas linguísticas e conceituais no corpus de estudo. Com base na hipótese da tradução cognitiva, as condições de mapeamento foram examinadas na língua-fonte e na língua-alvo. Ademais, amparados pela linguística de corpus e pela fraseologia, a partir de análise estatística e de análise de linhas de concordância, a convencionalidade dos fraseologismos traduzidos foram avaliados em termos de aspectos lexicogramaticais, semânticos, metafóricos e contextuais. Os resultados da pesquisa são apresentados em articulação com pesquisas empíricas afins. Ao todo, 21 aprendizes traduziram 81 fraseologismos, o que resultou em 1202 esquemas de tradução. As análises mostraram que 86% das traduções representam metáforas com condição de mapeamento similar. No entanto, 42% delas foram classificadas como fraseologismos metafóricos pouco ou não convencionais. Os achados sugerem que o aspecto mais desafiador nas traduções foi linguístico e não conceptual. Os aprendizes mantiveram a metáfora conceptual na língua-alvo, mas em geral lançaram mão de unidades lexicais incomuns na língua inglesa sob influência do sistema linguístico-cognitivo de sua língua materna.

**Palavras-chave:** metáfora; fraseologismo metafórico; tradução; corpus de aprendiz.

# 1 Introduction

This paper presents the findings of a study (Rocha, 2020a) on how Brazilian learners translate metaphorical phraseologies from Portuguese to English, from a lexical, semantic, and cognitive perspective. First, it was examined whether learners' phraseometaphorical choices were conventional in the English language, considering lexicogrammar, semantic, metaphor, and contextual features. Additionally, it evaluated whether the conceptual mappings underlying the phraseologies were similar or different when comparing the source language (SL) and the target language (TL).

Regarding the lexicogrammar and the semantic-metaphorical nature, the study aimed to determine if English learners use conventional or unconventional metaphorical phraseologies in their writing. The basic premise of this research is that phraseologies play a crucial role in enhancing foreign languages learners' lexical competence. According to Sinclair's idiom principle (1991), a language speaker has a collection of ready-made expressions in their mental lexicon that can be used to express coherent and natural utterances during communication. These expressions, which are known as phraseologies, are linguistic repetitions that have been passed down from one generation to the next and represent the conventional nature of language on different levels – lexical, syntactic, semantic, and pragmatic (Tagnin, 2013).

Learners of a foreign language may not always have access to ready-made expressions in their mental lexicon that they can immediately use. Not being aware of what is socially shared may cause them to create uncommon linguistic constructions that are scarcely or not at all observed in a linguistic community. When communicating, as pointed out by Alves and Tagnin (2010), they may be perceived as an innocent speaker/hearer (Fillmore, 1979), someone who is not aware of what is institutionalized in a language and therefore relies on literal or atypical usage. The idea of an innocent speaker/hearer can be reinterpreted from the perspective of a translator who is still learning and is not familiar with the conventions of the languages they are working with. This translator believes that there is complete equivalence between the languages and that a literal translation is possible or that each lexical item of the source text must be translated (Alves; Tagnin, 2010).

Considering the cognitive aspect, this work also relies on the guiding assumption that metaphors don't simply conceptualize a pre-existing reality, but rather create a new one (Lakoff; Johnson, 2003 [1980]). When it comes to translation, learners must face the challenge of dealing with a complex reality that can be categorized linguistically, metaphorically, and culturally. This can lead to changes in both the linguistic and conceptual levels. Therefore, "to translate a metaphor means to stand face to face with the kind of reality that the metaphor has construed" (Arduini, 2014, p. 41).

Combining both the linguistic and the conceptual viewpoints, we attempted to answer the following questions. Firstly, if phraseologies can be difficult for translation learners, then how would they react to the metaphors, which may be part of the translating process? In other words, would there be difficulties in translating phraseologies due to the underlying conceptual mappings? Secondly, regarding lexical choices, how could the phraseometaphor-

ical solutions proposed by the learners be characterized? Would they be conventional in the English language taking into account the lexicogrammar, semantic, and metaphorical contexts in which they are embedded?

To answer these questions, the study relies on four main areas: metaphor, translation, phraseology, and corpus linguistics. The first section provides information about the study corpus and explains how these fields are used to address the outlined questions. The second section presents research findings, comparing them with similar empirical studies that reflect on lexicon and metaphor from a pedagogical perspective: Boers (2000), Charteris-Black (2002), Danesi (1994, 2008), Deignan, Gabrys and Solska (1997), Irujo (1986), Littlemore and Low (2006a, 2006b), and Philip (2010). It also considers studies that focus on metaphor translation from a cognitive approach: Baiocco and Siqueira (2018), Kovács (2014), Mandelblit (1995), Martins (2008) and Rodríguez-Marquez (2010). The final section examines the implications of the findings for foreign languages teaching, with a particular focus on translation teaching and learning.

## 2 Theoretical and methodological background

A corpus of learner translations was compiled to analyze the phenomena under investigation. This corpus is a part of the Multilingual Student Translation (MUST) project (Granger; Lefer, 2018), which aims to develop a multilingual translation corpus to aid research in learner corpus and translation studies. The Brazilian component<sup>1</sup>, which is coordinated by Prof. Dr. Adriane Orenha-Ottaiano at São Paulo State University (UNESP), has the following characteristics: (i) it consists of 20 newspaper articles (500-800 words) written in contemporary Brazilian Portuguese. The articles cover a variety of subjects such as terrorism, politics, LGBT activism, environment, education, and arts; (ii) it is a parallel corpus translated from Portuguese to English; (iii) the maximum number of participants involved in this project is 21, who are undergraduate students pursuing a bachelor's degree in Languages (Translation) and a licentiate degree in Languages. These students have varying levels of proficiency, ranging from intermediate to advanced. The study corpus is divided into two sub-corpora – the Portuguese sub-corpus and the English sub-corpus. The Portuguese sub-corpus contains 13,520 tokens, while the English sub-corpus contains 205,176 tokens, both computed in the Sketch Engine platform. These corpora were used as the basis for extracting metaphorical phraseologies.

### 2.1 Metaphor studies

This research draws upon two theoretical frameworks in the metaphor studies literature: the conceptual metaphor theory and the cognitive-discourse perspective. The conceptual metaphor theory views metaphor as a relational mechanism that involves experiencing one thing in terms of another. This theory was used to determine the source and target domains of the conceptual metaphors underlying the phraseologies analyzed (Lakoff; Johnson, 2003 [1980]).

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<sup>1</sup> The Research Ethics Committee of IBILCE/Unesp approved the data collection under the number 94053718.4.0000.5466.

To experience something in terms of another is to understand a conceptual domain – “any coherent organization of experience” (Kövecses, 2010, p. 4) –, defined by another one. According to Lakoff (1987), conceptual domains are a result of Idealized Cognitive Models (ICM) or gestalt experiences, a coherent whole structured on human natural experiences. They are products of human nature (Lakoff, 1987; Lakoff; Johnson, 2003 [1980]) in interaction with the body (implying its perceptual-motor, mental and emotional dimensions), with the physical environment (space-motion, object manipulation, food habits, etc.), and with other people culturally situated (in social, political, economic, and religious levels).

Gestalt experiences, because human activity in the world, triggers the creation of metaphorical domains: the source domain (SD) that structures/defines the target domain (TD). The SD is a more concrete conceptual domain (e.g. physical orientation, objects, substances, plants, money, vision, travel, war, food, construction, games) that is derived, for instance, from linguistic evidence. The TD, in turn, is characterized by being a more abstract notion (e.g. love, time, ideas, people, understanding, argument, happiness, health, status, politics) that assists in the conceptualization of a SD (Lakoff; Johnson, 2003 [1980]; Kövecses, 2010).

Based on the conceptual metaphor theory, especially in Lakoff and Johnson (2003 [1980] and Kövecses (2005, 2010), the conceptual metaphors underlying the phraseologies raised in the corpus were identified. To guide this step, we consulted the Master Metaphor List (Lakoff; Espenson; Goldberg, 1989) and the MetaNet Metaphor Wiki<sup>2</sup>.

The metaphorical phraseologies in Portuguese were categorized into different domains for further interlanguage analysis. Table 1 provides an illustration of these domains, along with examples extracted from the Portuguese study corpus, highlighting the metaphorical phraseologies and their respective conceptual metaphors.

Table 1 – Source domains identified in the study corpus in Portuguese

Domains	Examples from the study corpus in Portuguese	Conceptual metaphor
Container	<i>Temer segue de pé e <b>impermeável às críticas</b> daqueles que questionam sua legitimidade e a dureza de seus ajustes.</i>	THE BODY IS A CONTAINER
Motion/ Direction	<i>Nós seguimos pelo caminho errado”, disse... ao anunciar as <b>linhas</b> que seu governo <b>seguirá</b>.</i>	MEANS ARE PATHS TO A PURPOSE
Control	<i>Seu governo está <b>na corda bamba</b> desde que o jornal O Globo revelou...uma comprometedor gravacão de uma conversa com o empresário.</i>	CONTROL IS UP/LESS OF CONTROL IS DOWN
Plant	<i>A edição das medidas provisórias que reduzem áreas protegidas...está na <b>raiz desse problema</b>.</i>	PROBLEM IS A PLANT
Construction	<i>Meus <b>argumentos</b> estavam <b>alicerçados</b> em literatura e publicacões científicas.</i>	ARGUMENT IS CONSTRUCTION
War/physical conflict	<i>Temer conseguiu ganhar tempo e sobreviveu ao julgamento... ainda há muitas <b>frentes abertas</b>.</i>	POLITIC IS WAR/PHYSICAL CONFLICT

<sup>2</sup> Repositoire MetaNet Metaphor Wiki: [https://metaphor.icsi.berkeley.edu/pub/en/index.php/MetaNet\\_Metaphor\\_Wiki](https://metaphor.icsi.berkeley.edu/pub/en/index.php/MetaNet_Metaphor_Wiki). Access in 2019/2020.

Games/sports	<i>A frase é do presidente americano...e joga no nosso colo a enorme responsabilidade de <b>virar o jogo</b>.</i>	POLITICAL ACTIVITIES ARE GAMES/SPORTS
Money/ economic transactions	<i>Os anos de abuso... de recursos naturais... vinham matando rios.... A natureza <b>cobrou seu preço</b>.</i>	NATURE EXPLOITATION IS AN ECONOMIC TRANSACTION
Play	<i>O ex-ministro da Casa Civil José Dirceu tem <b>evitado os holofotes</b>.</i>	POLITICAL ACTIVITY IS A PLAY
Other domains	<i>Muitas levarão cantadas machistas e <b>engolirão a seco</b> o vazio do respeito que não existe no dia a dia de muitas dessas profissionais.</i>	ACCEPTING IS SWALLOWING

Source: created by the author.

Before identifying the conceptual mappings in the study corpus in Portuguese, we identified the linguistic metaphors. We initially selected possible candidates for metaphorical phraseologies and then observed if they had an abstract reference that was semantically related to a distinct use of its concrete meaning. To improve the methodological strategy, we used a linguistic procedure developed under a cognitive-discourse approach to metaphor: the Metaphor Identification Procedure (MIP), created by the Pragglejaz Group (2007). This procedure intends to investigate the communicative functions of metaphor in text/discourse (Steen, 2007; Vereza, 2016). To establish the metaphorical meaning, they assumed the omnipresence of metaphor in language, aiming to explore its usage in different genres. Once the usage has been set as a starting point, the Group defines metaphorical meanings as the ones that emerge from the contrast between the contextual meaning of a lexical unit and its basic meaning. The basic meaning is absent from the context under investigation but is observed in other contexts (Steen et al., 2010). The phraseology highlighted below exemplifies the contrast between the basic and contextual meaning:

*Em leitura e em matemática, que são as outras duas áreas avaliadas pelo Pisa, o quadro também é desalentador: seguimos no grupo dos lanternas, com a 59ª e 66ª colocações, respectivamente. [...] Todo esse cenário mostra o **fundo do poço** a que chegamos, algo que as próprias avaliações brasileiras já vinham, ano a ano, indicando.*

In this excerpt, the phraseology *fundo do poço* has a contextual meaning that contrasts with and can be understood in terms of its basic meaning. Contextually, it means a difficult situation and is used to describe Brazil's poor performance in an educational assessment. The basic meaning of the phraseology is a hole dug to reach underground water. In the educational scenario, being in the *fundo do poço* is similar to hitting the bottom of a well and struggling to find a way out.

Through the MIP procedure, we were able to classify approximately 200 phraseologies as metaphorical. However, only 81 of them were considered for further cross-linguistic analysis as they met the statistical threshold in tests such as T-score, MI, and LogDice, and were predominantly metaphorical in the concordance lines analysis based on the Portuguese reference corpus (Portuguese Web 2011 - ptTenTen). The research only considered conventional metaphorical phraseologies in Portuguese and did not include weaker associations and discourse-specific metaphors (Steen, 2007; Vereza, 2013), which are not institutionalized in the language.

To summarize it, the conceptual metaphor theoretical and methodological framework, along with the cognitive-discourse perspective, supported the identification of linguistic and conceptual metaphors in the Portuguese study corpus. The mapping correspondences were described in terms of SD and TD, and the conceptual metaphors were analyzed, enabling the analysis of Portuguese phraseologies and their translations to English. This comparison helped determine whether the mapping conditions were similar or different between the two languages.

## 2.2 Metaphor and translation

The reality constructed via metaphor can involve different conceptual systems. The difference among them, according to researchers such as Mandelblit (1995) and Kövecses (2014), would explain difficulties in translation. Mandelblit's cognitive translation hypothesis, proposed in 1995, argues that difficulties in translation arise due to a lack of correlation between the conceptual systems of the source language (SL) and the target language (TL). In other words, the process of translation involves transferring information from one system to another. This transfer is faster when there is a similar mapping condition (SMC) between the two languages, compared to a different mapping condition (DMC), where the changes would be both linguistic and conceptual. According to Mandelblit (1995), the more cultural aspects shared by the languages, the higher are the chances of a similar mapping condition.

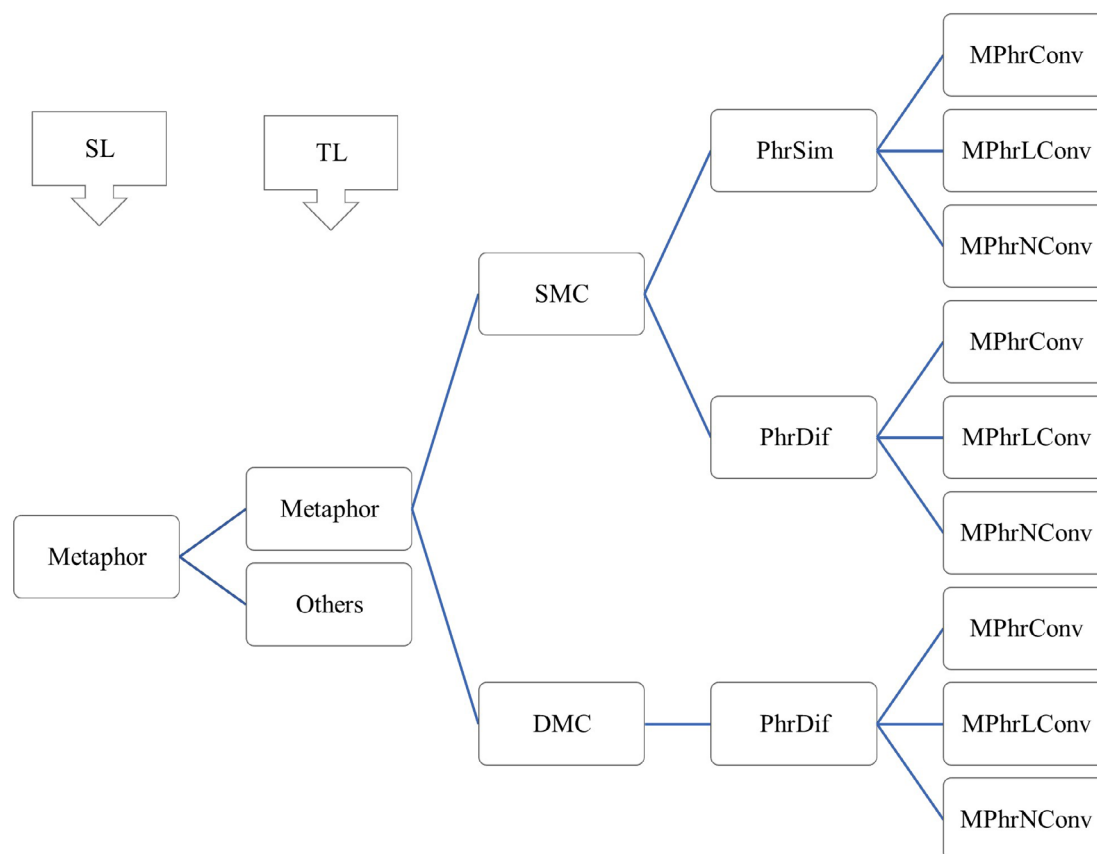
In Mandelblit's view, a translation that requires a conceptual system transfer can be seen as a problem-solving process. The translator aims to find a linguistic expression in the target language (TL) that conveys the same communicative purpose as the one in the source language (SL). During the process, they may experience a temporary functional fixation<sup>3</sup>, which is a state where they remain focused on the SL metaphorical system and struggle to find an equivalent expression in the TL.

By emphasizing the cognitive aspect of metaphors and proposing a hypothesis for how the translation process occurs, Mandelblit's work has encouraged cognitive-based translation research (e.g. Al-Hasnawi, 2007; Baiocco; Siqueira, 2018; Maalej, 2008; Martins, 2008; Rodríguez-Marquez, 2010; Taheri-Aradali, Bagheri, Eidy, 2013). Unlike Mandelblit (1995), the focus of these researchers was not on the process, but on the product of translation. To investigate it, they mobilized possible translation schemes, which involved, for example, the comparison of mapping conditions, linguistic realization, among other strategies. Our research follows a similar approach to Taheri-Ardali, Bagheri, and Eidy's work (2013), designing a scheme to test the hypothesis that focuses on translation as a product. The reason behind creating a new schema was due to the nature of our data, which resulted from translations done by learners. Since no translation equivalence was established previously, there were several translation possibilities available. Our scheme includes the conventional aspect of metaphorical phraseologies as well.

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<sup>3</sup> According to Mandelblit (1995) this idea has its origins in the Gestalt School, which perceives the problem resolution as a process in which who tries to solve it do so based on insights from its structure. Failures in its resolution would be explained by functional fixation, to the focus given to the original formation of the problem, which would impede its reconstruction and solution.

Figure 1 – Translation schemes of metaphorical phraseologies



Source: adapted from Rocha (2020a, p. 88) based on Taheri-Ardali, Bagheri, Eidy (2013).

The abbreviation **SMC** (Similar Mapping Condition) refers to the phraseology in the source language (SL) that shares a similar conceptual mapping to the phraseology of the target language (TL). This similarity is based on the source and target domains, for example, *barril de pólvora* and *powder keg* share the same conceptual metaphor: ANGRY PERSON IS A CONTAINER ABOUT TO EXPLODE, as mapped in the SL. On the other hand, **DMC** (Different Mapping Condition) refers to the phraseology in the SL that does not share the same conceptual mapping to the phraseology of the TL. For instance, *trazer à tona* and *bring to the table* have different mappings. In *trazer à tona*, one can distinguish an image of an object submerged in a container, which is not observed in *bring to the table*.

**PhrSim** and **PhrDif** refer to phraseologies with similar and different lexical implementations, respectively. This relation is quite complex to establish. When studying different languages, Kövecses understands that both have unique lexical implementations. Taheri-Ardali, Bagheri, and Eidy (2013) reported difficulties in defining it, but they acknowledge the distinction proposed by Mandelblit (1995). According to Mandelblit, in the case of similar lexical implementation, there would be a word-to-word translation.

In this paper, the distinction made by Mandelblit was maintained. The lexical form of the Portuguese phraseology was compared with the translations made by the learners. During this process, cognate forms and literal or prima facie translations were also taken into consideration. For instance, the phraseology *barril de pólvora*, when compared to *barrel of gunpowder*, was distinguished as PhrSim, whereas in comparison to *powder keg*, it was recognized



as PhrDif. In this case, the correlation at the word level was established through the use of cognates and the syntagmatic structure. If a learner altered the sequence of words within a phraseology, while using the same words (e.g., changing *barrel of gunpowder* to *gunpowder barrel*), the phraseology was still identified as PhrSim. Before parasynonymic forms, there were certain difficulties in translating phraseologies such as *debaixo do tapete* which can be translated as *under the carpet*, *under the mat*, or *under the rug*. These translations were all recognized as PhrSim since they are possible direct translations. At this analytical stage, although the semantic aspect cannot be completely disregarded, the lexical form took precedence.

In our analysis of the phraseology's conventional aspects, we approached the subject from a lexicogrammar and semantic-metaphorical perspective, using the conventionality levels proposed by Tagnin (2013). Therefore, from a lexicogrammar point of view, we examined the associative nature of phraseologies by conducting statistical tests which helped us confirm if the learner's choices were statistically significant and not random combinations. From a semantic-metaphorical perspective, the metaphorical meaning of translated phraseologies in English were interpreted by examining concordance lines in a reference corpus. The analysis also took into account the contextual meaning in both languages. As it focused on translations by learners, three classes were differentiated: **MPhrConv**, **MPhrLConv**, and **MPhrNConv**.

- ◆ **MPhrConv (Conventional Metaphorical Phraseology):** it refers to the identification of statistically significant phraseologies in two or more measures (T-score > 2, MI > 3, and LogDice > 3). These phraseologies should exhibit a predominance of metaphorical occurrences that are semantically compatible with the phraseology of the source language. This is determined by analyzing the concordance line samples in the English reference corpus.
- ◆ **MPhrLConv (Less Conventional Metaphorical Phraseology):** it refers to two types of phraseologies. The first type includes statistically relevant phraseologies that have less metaphorical occurrences and more basic/non-metaphorical meanings. The second type includes phraseologies with statistical measures below the proposed values, but with a predominance of metaphorical occurrences that are semantically compatible with the phraseology of the SL.
- ◆ **MPhrNConv (Non-Conventional Metaphorical Phraseology):** it refers to phraseologies, above or below the statistical measures, semantically incompatible with the context of the expression in the SL; it also includes occurrences that did not appear in the list of collocates of a node. In this case, as well as in the others, the conservation of the wording *metaphorical phraseologies* is due to the learner's own construction that is metaphorical in the translations when considered a contrast between contextual and basic meanings.

The category **Others** was applied when the learner did not use a metaphor, but instead used a non-figurative lexicon, paraphrased the meaning, or omitted the lexical unit that triggered the metaphor. This category also included instances in which the learner did not resort to a phraseology (whether it was metaphorical or not) or employed a simple word or compound.

The adoption of the mentioned translation schemas was fundamental to achieving the research goals. Their application to the data enabled us to identify the phraseologies mapping conditions and their conventional aspects, providing an overall picture of learners' translation trends.

### 2.3 Metaphor, phraseology, and corpus linguistics

The lexicon is a special place to explore metaphors, and one way to do that is through phraseologies. They are linguistic representations of a social group's collective identity. Saussure's (2012 [1916]) concept of language as a social institution, as well as Coseriu's (1979) distinction of language system and norm, as stated by Zuluaga, are significant to understand the linguistic status of phraseologies. According to Zuluaga (1980, p. 21), they represent "the collective heritage of a linguistic community, [...] part of the repertoire of linguistic elements that precedes the discourse and are known by its speakers. They are normal traditional elements repeated in the linguistic activity"<sup>4</sup>. Their reproduction in chunks, as part of the idiom principle (Sinclair, 1991), reinforces their importance for foreigners or second language learners.

Since phraseologies are shared by a social community and are repeated in lexical bundles, in different nuances, they have fixation as a distinctive feature, not only in the system level, considering semantic and syntactic aspects, but also in the norm level, which considers language usage (Zuluaga, 1980). According to the theoretical views of Ruiz Gurillo (1997) and Corpas Pastor (1996), which align with Zuluaga's approach, phraseologies have the following properties:

- 1 They are pluriverbal units, which means they consist of at least two words.
- 2 They are institutionalized, meaning their use is conventional and recognized by the speakers of a particular language, and they occur frequently in discourse.
- 3 They are established in syntagmatic and semantic terms.
- 4 They are subject to variation due to sociolinguistic and contextual factors.
- 5 They may or may not be idiomatic or compositional, meaning the unit's meaning may or may not be the sum of its parts. They can also result from metaphorical processes.
- 6 These properties exist on a continuum rather than being categorical.

The properties mentioned above include a range of phraseologies that are difficult to identify precisely. According to Ruiz Gurillo (1997, p. 85), they are units "of fuzzy borders, of malleable and movable limits"<sup>5</sup>. In this research, aware of the tenuous boundary that delimits phraseologies, we acknowledge that they are non-discrete units, following the works of Corpas Pastor (1996), Ruiz Gurillo (1997), Philip (2011), and Rocha (2017). Acknowledging it does not necessarily mean denying the possibility of distinguishing them, but in some cases, it can be challenging due to overlapping criteria. Additionally, the criteria used may be influenced by the speaker's subjective evaluation, which goes beyond the linguistic level (Philip, 2011).

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<sup>4</sup> [...] al patrimonio colectivo de la comunidad lingüística, forman parte del acervo [...] o repertorio de elementos lingüísticos, anteriores al hablar, conocidos por los hablantes. Son elementos tradicionales 'normales' y repetidos en la actividad lingüística.

<sup>5</sup> [...] fronteras difusas, de límites maleables y movibles.

Making a clear distinction between different types of phraseologies is beyond the scope of this research. Thus, our focus is on referential phraseologies, which convey information related to daily life and world entities (Granger; Paquot, 2008) without being linked to a specific category. Metaphor is the key element that connects them, and for this reason, in this paper they are being referred to as *metaphorical phraseologies*: a pluriverbal unit, statistically relevant, sanctioned and fixed by the linguistic norm of a society. It is used in varied socio-communicative contexts, formally structured in a syntagm, and semantically featured by (relative) compositionality/idiomaticity, as well as for its metaphoricity.

This perspective of understanding metaphorical phraseologies favors a dialogue between two major branches in phraseological studies: the phraseological approach, which concentrates on linguistic properties; and the frequency-based approach or distributional approach (Evert, 2005; Nesselhauf, 2005; Granger, Paquot, 2008), which highlights the frequency of co-occurrence of lexical units.

The frequency-based approach is closely associated with corpus linguistics since it originated within its scope. Along with other areas, corpus linguistics plays a significant role in the development of this research. By considering language as a probabilistic system, corpus linguistics reveals what is likely to happen in language usage, highlighting the systematic nature of linguistic patterns (Berber Sardinha, 2004; Halliday, 1991). Consequently, it rejects the notion of randomness in language and reinforces the idea that language is highly organized and planned (Sinclair, 1996). This organization can also be observed in metaphorical terms, either on the linguistic or on the conceptual level.

The use of a corpus can be a valuable tool to understand language and the cognitive concepts it represents. A corpus linguistics approach, in its essence inductive (Tognini-Bonelli, 2001), has the potential to redefine and reorient linguistic theories. It can also complement existing research that focuses on investigating metaphor. Examples of such research include studies by Deignan (1997, 2005), Berber Sardinha (2011a, 2016), Semino (2008), and Rocha (2020a, 2020b).

Corpus linguistics applied to metaphor studies represents a cognitive-discourse shift that uses language as a data source to understand metaphor in thought (Vereza, 2013). Deignan's (1997) works are a notable example of this approach. Deignan (1997) argues that while the metaphor conceptual theory can apprehend the linguistic metaphor nature, it is not complete without the use of corpus. By examining syntactic, collocational, and semantic patterns, which were not prioritized in previous investigations due to the limitations of intuition, the author reinforces the ubiquity of the phenomenon in language and its conventionality.

In this study, the analysis of conventional metaphorical phraseologies is based on linguistic evidence and patterns identified using the epistemological perspective of corpus linguistics, in conjunction with the frequency-based approach (Granger, Paquot, 2008). The procedure used is based on the co-occurrence of patterns (nodule + collocate) that are statistically determined, following the work of Sinclair, Jones and Daley (2003 [1970]) and Berber Sardinha (2011a, 2012). The platform Sketch Engine (Kilgarriff et al., 2014) was used to access the reference corpora Portuguese Web 2011 – ptTenTen and English Web 2015 – enTenTen, which assisted in comparing the learner's phraseometaphorical choices.

The Sketch Engine platform was useful for two methodological steps. The first step aimed to confirm the *node + collocate* co-occurrence was not random, by using a reference corpus in Portuguese and measures such as T-score, MI (Mutual Information), and LogDice. The

researcher initially selected phraseologies based on intuition and followed the MIP application. In the next stage, a statistical threshold was set in the Sketch Engine, which required a phraseology to have values of  $MI > 3$ ,  $T\text{-score} > 2$  and  $\text{LogDice} > 2$  to be included in the comparative analysis between learner's translations and reference corpora. Like Berber Sardinha's (2011a) decision, a phraseology needed to exceed at least two of these values to be considered for the analysis.

The second step in the platform consisted of a comparative analysis which involved using concordance tools and statistical measures to determine if the learner's phraseometaphorical choices were conventional in the TL context. These measures are widely used in corpora research and are generated by the platform. Overall, they show the strength and exclusivity of the associations. According to the Sketch Engine Platform, the T-score measure shows that a word association is not random, indicating the certainty of the association. The Mutual Information score measures how often words co-occur compared to how often they appear separately. The LogDice measure indicates the typicality or strength of a co-occurrence. The values applied in this research are based on similar studies conducted by Berber Sardinha (2011a), Brezina, McEnery and Wattam (2015), Durrant and Schmitt (2009), Frankenberg-Garcia (2018), McEnery (2006), and Stubbs (2001).

It's worth noting that the use of metaphors was another factor considered when evaluating the phraseologies in the comparative analysis. In addition to passing tests, it was necessary to check whether they were mostly used in a metaphorical context in the concordance lines. However, examining them when the occurrences are high is not feasible. To address this issue, a statistically random sample of the total concordance lines was used, obtained through the "get a random sample" command of the Sketch Engine platform. For both languages, we analyzed one hundred lines of phraseologies with over one hundred occurrences. Our goal was to determine if the phraseologies were used in a metaphorical context regardless of the conceptual metaphor of the source language. Therefore, phraseologies that exceeded the threshold but did not show a predominance of metaphorical occurrences were discarded.

### 3 Research findings

As previously mentioned, 81 phraseologies were manually identified in 20 texts in Portuguese. They resulted in 1202 proposed translations from a maximum of 21 participants. In this section, we present some considerations based on the translation schemes applied by the students. Table 2 shows a quantitative distribution of the schemes by SD. The number in parentheses after each domain refers to the total numbers of phraseologies mapped in Portuguese for that domain:

Table 2—General distribution of translation schemes

Translation schemes	Total number of schemes translated by domain										Total/%
	Container (9)	Motion/Direction (13)	Control (9)	Plant (6)	Construction (5)	War/physical conflict (12)	Games/sports (4)	Money/Economic trans. (4)	Play (3)	Other domains (17)	
SMC/PhrSim/MPhrConv	22	67	60	28	3	47	10	0	15	51	303/1202 (25%)
SMC/PhrSim/MPhrLConv	14	13	8	5	6	13	3	16	8	26	112/1202 (9%)
SMC/PhrSim/ MPhrNConv	4	18	0	15	10	3	0	0	1	38	89/1202 (7%)
SMC/PhrDif/MPhrConv	49	24	25	11	28	49	25	9	3	50	273/1202 (23%)
SMC/PhrDif/MPhrLConv	22	18	18	3	14	21	10	20	2	16	144/1202 (12%)
SMC/PhrDif/MPhrNConv	6	27	10	7	10	14	2	12	2	35	125/1202 (10%)
DMC/PhrDif/MPhrConv	3	1	2	2	0	4	9	0	0	2	23/1202 (2%)
DMC/PhrDif/MPhrLConv	0	1	0	6	2	0	0	0	0	2	11/1202 (1%)
DMC/PhrDif/ MPhrNConv	4	7	1	0	1	5	0	0	0	11	29/1202 (3%)
Others	7	9	7	5	1	12	4	1	15	32	93/1202 (8%)
Total	131	185	131	82	75	168	63	58	46	263	1202/100%

Source: adapted from Rocha (2020a, p. 169)

Looking at the Table, we can see that the *others* category accounts for 8% of all schemes. The data analyzed includes non-metaphorical occurrences, such as paraphrases of the source language's wording, as well as omissions and instances in which a phraseology was not used. This can be seen through examples (1) to (3):

- (1) *Muitas levarão cantadas machistas e engolirão a seco o vazio do respeito que não existe no dia a dia de muitas dessas profissionais.*

Many gonna rather **accept** and reproduce the sexist, homophobic and racist jokes.

- (2) *O que vemos no noticiário político ou nas páginas policiais – cada vez mais semelhantes entre si – é mais um ato do que se desenrola nesse mesmo **pano de fundo**.*

What we see in the political news or in police pages - each time more alike - is one more act of what is going on at this same **background**.

- (3) *A desconfiança passou a orientar a ação dos legisladores governistas, que aprovaram sanções à Rússia contra a vontade da Casa Branca e **deram passos** para impedir que o presidente demita seu secretário de Justiça...*

The suspicion began to guide the actions of government legislators, which have approved sanctions to Russia against the will of the White House and **Ø** prevented that the President dismisses his...

In (1), one of the learners suggested the paraphrase *accept* to replace the phraseology *engolir a seco*. The learner probably used this strategy because they were not familiar with a conventional metaphorical phraseology in the target language. For instance, *swallow hard* is a phraseology that expresses the acceptance of an idea grudgingly. It appears 2,906 times in the reference corpus in English and has a T-score of 53.32, MI of 6.52 and LogDice of 4.69. In this case, it is acceptable to use a certain interpretation of the SL phraseology, even though it might not be entirely appropriate in the context. However, this approach can result in a loss of the metaphorical imagery.

In example (2), the phraseology *pano de fundo* was replaced by a simple word *background*, but the mapping condition of the SL was preserved by the conceptual metaphor LIFE IS A PLAY. In example (3), the learner chose to omit the SL phraseology, which is based on the conceptual metaphor MEANS ARE PATHS TO A PURPOSE. Alternatively, the learner could have used the metaphorical phraseology *take a step*, which has SMC and is statistically significant (74,640 occurrences, T-score 254.41, MI 3.86 and LogDice 6.51).

Metaphors, particularly linguistic ones, serve a textual function by highlighting an idea, establishing relationships, or creating some communicative effect in the reader. However, these functions are not always conveyed in translations when literal solutions are proposed, leading to a loss of semantic features. Nevertheless, in our data, this loss is not significant, as 92% of learners attempted to maintain metaphorical phraseologies in both languages, using either similar or different mapping conditions (SMC/DMC).

It was observed that 86% of the translations contain SMC, regardless of whether they are similar or different in nature, and whether they are conventional, less conventional, or non-conventional. This high percentage indicates that most learners have retained the conceptual metaphor of the source language in the target language. This can be attributed to their L1's cognitive, linguistic, and cultural interference. However, this percentage has a double implication that needs to be considered.

The first one is favorable to the learner. It would be related to the fact that in the phraseologies analyzed, both languages share, to an extent, cognitive, linguistic, and cultural traditions that make them similar in terms of mapping conditions. This could lead to conventional translation solutions when the learner uses their knowledge of their mother tongue's lexical, semantic, and conceptual structures. Besides that, human action in the social and physical environment – the embodiment role (Gibbs, 2006; Kövecses, 2010; Lakoff, 1987) – plays a significant role in the mapping maintenance. The domains presented in this research

are perceptible in both Portuguese and English languages, indicating that they share common ways of categorizing reality.

Linguistically, SMC is evidenced by similar lexical realization (PhrSim) through *prima facie* translation, examples (4) and (5), which are linked to the conceptual metaphors PROBLEM IS PLANT and POLITIC IS WAR/PHYSICAL CONFLICT.

- (1) *A edição das medidas provisórias que reduzem áreas protegidas e regularizam a grilagem está na **raiz desse problema**.*

The change of the provisional measures that reduce protected areas and regularize the land grabbing is in the **root of this problem**.

- (2) *O novo líder francês vê essa **posição**, que já vinha sendo **defendida**... como uma oportunidade para reforçar a unidade entre os 27 países do bloco.*

The new French leader sees this **position**, which has already been **defended** by the British Prime Minister Theresa May's direct advisers, as an opportunity to reinforce the unity among the 27 countries that constitute the bloc.

Also, SMC is expressed using different lexical realization (PhrDif) and conceptual metaphors, such as ACCEPTING IS SWALLOWING and INSISTENCE IS CONTINUOUS REPETITION, as exemplified in (6) and (7).

- (3) *Muitas levarão cantadas machistas e **engolirão a seco** o vazio do respeito que não existe no dia a dia de muitas dessas profissionais.*

Many will be chatted up with in a sexist way and **swallow hard** the empty space of respect, which doesn't exist in the daily life of those professionals.

- (4) *Um bom trabalho diplomático com os vizinhos poderia ter melhor efeito do que deixar nossas polícias **enxugando gelo**.*

A good diplomatic work with the neighbors could have a better effect than leaving the **police herding cats**.

In nearly half of the cases (48%), translations were made without any significant challenges due to the overlapping linguistic and conceptual features among the phraseologies, using SMC and MPhrConv. When learning a new language, it's common for the learner to rely on their mother tongue as a starting point. This is because the learner's native language is their main point of reference, especially when faced with expressions that require translation. Therefore, embracing the source language might be an effective strategy for a successful translation.

Nesselhauf (2005) studied the production of lexical patterns used by learners in German and English. Although she did not assess the role of metaphor, she pointed out the beneficial influence of the mother tongue. The cognitive-linguistic proximity between the mother tongue and the target language can be an advantage, as observed by Boers (2000), Charteris-Black (2002), Danesi (1994, 2008), Deignan, Gabrys, and Solska (1997), Littlemore et al. (2014) and Irujo (1986). However, it can also have the opposite effect, leading the learner to make uncommon choices. This brings us to the second implication: the negative interference of the mother tongue. It was noted that some learners stick to Portuguese, maintain SMC, but use less conventional phrases in the analyzed contexts (MPhraLConv or MPhraNConv - 38%), as can be seen in examples (8) and (9):

- (5) *Temer segue de pé e impermeável às críticas* daqueles que questionam sua legitimidade e a dureza de seus ajustes.

But Temer follows up and **impermeable to criticism** from those who question his legitimacy and the toughness of his adjustments.

- (6) *Parece que somos um barril de pólvora* a procura de uma faísca.

It seems that we are a **barrel of gunpowder** looking for a spark.

In (8), *impermeável às críticas* is the linguistic realization of the metaphor THE BODY IS A CONTAINER (Lakoff; Johnson, 2003). In this example, Michel Temer's body is compared to a closed container, which is impervious to any substances, in this case, negative criticism that could harm his political reputation. One of the learners suggested *impermeable* as a direct translation, but it was not found in the co-occurrence list of *criticism*. From a cognitive-linguistic perspective, the metaphor is preserved, but *impermeable to criticism* is not a conventional metaphorical phraseology. Alternative phraseologies that are statistically relevant and appropriate to the context include *impervious to criticism* (72 occurrences, T-score: 8.44 MI: 7.57 and LogDice: 2.51) and *immune to criticism* (371 occurrences, T-score: 18.89 MI: 5.70 and LogDice: 4.06).

Another phraseology which has THE BODY IS A CONTAINER as an underlying conceptual metaphor is *barril de pólvora* (example 9). Specifically, the underlying metaphor is ANGRY PERSON IS A CONTAINER ABOUT TO EXPLODE, resulting from the metaphor association THE BODY IS A CONTAINER FOR THE EMOTIONS, EMOTION IS HEAT AND ANGER IS HEAT (Kövecses, 2010). The phraseology *barrel of gunpowder* (208 occurrences, T-score: 14,41 MI: 10,44 and LogDice: 4,67), although statistically significant, is MPhrLConv because of the basic meanings predominance in the concordance lines examined. However, this translation is not entirely accurate because it mainly refers to a wooden container filled with gunpowder (example 10). A more suitable translation (MPhrConv) would be *powder keg* (2,332 occurrences, T-score: 48,29 MI: 14,02 and LogDice: 8,60), which is a metaphorical term used to describe a situation that is likely to become dangerous or explosive, as suggested in (11):

- (7) Guy Fawkes was arrested in a cellar beneath the House of Lords with thirty-six **barrel of gunpowder**.

- (8) According to his manifesto, Flanagan was enraged at this woman. He was a **powder keg** just waiting to go off at her.

It appears that in some cases a learner's connection to their native language could hinder their ability to translate accurately. This is because they may be fixated on certain linguistic patterns that are specific to their native language (something like the functional fixation stated by Mandelblit (1995)). As a result, when translating into another language, they may choose words that are grammatically correct in that language but are not commonly used. They resort to what is possible at system-level (Halliday, 1991; Berber Sardinha, 2004) as opposed to norm-level choices (Coseriu, 1979).

Admissible solutions within the system also were a tendency verified by Mauranen (2008) when analyzing translator's production. This tendency was identified through a corpus-based methodology that examines the likelihood of linguistic patterns co-occurring.



Corpus analysis, as noted by Deignan (1997), is a valuable tool for exploring co-occurrences and can provide useful insights into how the metaphorical lexicon works, which can be beneficial for the translation practice.

Different Mapping Conditions (DMC) were employed in only 6% of the translation schemes, as shown in Table 2. This lower percentage in comparison to SMC (Same Mapping Conditions) strengthens the possibility of domain transposition from the source language (SL) to the target language (TL). It also indicates that, in relation to the analyzed domains, the languages would tend to have a common mapping. In every translation, the phraseological implementation is different (PhrDif), which is justified by the domain change. For instance, in (12), DMC is due to the connection of *trazer à tona* to the conceptual metaphor TRUTHS ARE OBJECTS SUBMERGED IN A CONTAINER, which is not observed in *bring to the table* (12):

- (9) *Aí está a outra verdade, está mais Heideggeriana, que Schwartz trouxe à tona: a maioria de nós perdeu a trilha do que é arte nos dias de hoje.*

That's another truth, this even closer to Heidegger, that Schwartz **brought to the table**: most of us has lost the track of what is art nowadays.

When learners attempt to use a domain distinct from the one in the source language, they may experience difficulties, as seen when translating *impermeável às críticas* to *unshakable to the criticism*, a non-conventional metaphorical phraseology (13):

- (10) But Temer stands on his feet and is **unshakable to the criticism** of those who call the legitimacy and harshness of his acts into question.

Regarding the relationship between PhrSim (41%) and PhrDif (51%), there appears to be no significant difference between them. However, there is more PhrDif because the DMC category is composed of a different lexical implementation. When these categories are analyzed based on the conventionality criteria, the percentage of PhrSim/MPhrConv is 25% and the percentage of PhrDif/MPhrConv is 25%. If we look only at PhrSim, we realize that when the learner chooses cognates or prima facie translations, they have a slightly higher chance of arriving at a conventional phraseology. The amount of PhrSim/MPhrLConv and MPhrNConv is 16%. And the percentage of PhrDif/MPhrLConv and PhrDif/MPhrNConv is 26%.

The division of domains was made to organize and group phraseologies for analysis. The purpose was not to evaluate how translations would take place in each domain or the challenges faced by learners in each one. However, the container, motion/direction, and control domains were the most productive in terms of metaphorical phraseologies. This may be because they have imagetic schemes that organize spatial experiences, making them more commonly found in languages (Lakoff, 1987; Kövecses, 2010). It is important to note that there was no specific criterion to delimit the number of domains, as they were organized based on phraseologies raised without a specific categorization in mind.

After analyzing Table 2, it was observed that the following domains were less difficult, as they had a higher percentage of MPhrConv in comparison to the other categories combined: container (56%), control (66%), war/physical conflict (60%), and games (70%). On the other hand, the most challenging domains were construction (59%), money/economic transaction (85%), play (61%), and other domains (61%). The plant domains accounted for 50% of MPhrConv and 50% of the other categories combined.

The research findings, with a predominance of SMC translations, are consistent with the results of similar studies. For example, Kövecses (2005) analyzed the translations of idioms from Hungarian to English and found that the most common strategy used was the maintenance of the conceptual metaphor. Martins (2008) points out a high level of conceptual similarity in metaphors used in abstracts written in Portuguese and translated into English. Additionally, Rodríguez Marquez (2010) found no cultural differences in terms of conceptual understanding when analyzing translation patterns in specialized language (economy) between American English and Mexican Spanish. Baiocco and Siqueira (2018) conducted a study on the use of conceptual mappings in literary translation from Portuguese to English. They found out that, despite some expressions being translated literally, there were still many similarities in the mappings used. This suggests that, from a conceptual perspective, the languages share many similarities in how they categorize reality. This observation supports the idea that there may be more conceptual approximations than differences between these languages.

Researchers who discuss the challenges of translating conceptual metaphors, such as Al-Haswani (2007), Kövecses (2014), Maalej (2008), and Mandelblit (1995), suggest that learners should be aware of the cultural and conceptual differences between languages to achieve a satisfactory translation. However, in addition to the difficulties posed by conceptual systems, there is also the issue of lexical choice that can influence the translation process.

Based on the data investigated, it appears that the main source of difficulty for language learners is not necessarily caused by the difference or lack of correlation between conceptual systems, as stated in Mandelbit (1995) and Kövecses (2014), or the lack of exposure to the conceptual system of the target language, as affirmed by Danesi (2004). Instead, this research suggests that the awareness of the conceptual mappings seems to be of secondary importance since only 6% of the phraseologies have DMC. The real problem lies on the lexical level or, more precisely, on the lexicon-semantic aspect, even in the face of common conceptual mappings.

The lexicon-semantic influence is apparent in phraseologies when assessing the conventionality parameter (MPhrConv/MPhrLConv and MPhrNConv). Regardless of the mapping condition or phraseological implementation, 50% of translations are MPhrConv, 22% are MPhrLConv, and 20% are MPhrNConv. At first glance, the MPhrConv numbers are high, indicating the learners' ability to suggest conventional choices. However, when considering less or non-conventional choices together, 42% of phraseologies signal a lack of familiarity among some learners with the metaphorical lexicon commonly used in the English language. Examples of non-conventional metaphorical phraseologies with SMC are presented from 14 to 17, while conventional ones, taken from the English reference corpus (*English Web 2015-enTenTen15*) are presented in parentheses.

- (11) *Nem sequer temos boas perspectivas para, num futuro próximo, dar o **salto de qualidade** de que o Brasil tanto necessita.*

They don't even have good perspectives to, in the near future, take a **leap of quality** Brazil needs so badly (**quantum leap** - 6,011 occurrences, *T-score* 77,50 *MI* 11,09 and 8,76).

- (12) *Embora alguns usuários possam imaginar que sejam capazes de controlar o consumo, cedo ou tarde, descobrem que, de fato, já não são **senhores de si próprios**.*

Although some users can think that they are capable of controlling the consume, sooner or later, they find out they are not indeed **their own owner (be your own master** – 2,111 occurrences, T-score 18,98, MI 2,96 and LogDice 5,09).

- (13) *Os anos de abuso descontrolado de recursos naturais[...] vinham matando rios e nascentes. A natureza **cobrou seu preço**.*

The years of uncontrolled abuse of natural resources [...] had been killing rivers and headwaters. Nature has **charged its price (takes its toll** – 31,835 occurrences, T-score 176,83 MI 6,81 and LogDice 5,51).

- (14) *Transcrevo o depoimento de um adicto recuperado. Ele fala com a força e a sinceridade de quem esteve no **fundo do poço** [...].*

I transcript the testimonial of a recover addicted. He speaks with strength and sincerity whom was in **bottom of the shaft (rock bottom** – 6,418 occurrences, T-score 79,38 MI 6,78 and LogDice 6,66).

Based on the analysis carried out, it appears that the awareness of the linguistic aspect has more influence than the awareness of the cognitive aspect. In line with Deignan, Gabrys e Solska's (1997) argumentation, having the same conceptual metaphor does not necessarily mean that the linguistic expression will be the same in different languages. As such, decoding of conceptual metaphor would not be a problem per se "however, the exact words and phrases which express this conceptual link in L2 cannot be guessed by reference to L1, so these need to be discussed and learned for encoding purposes" (Deignan, Gabrys; Solska, 1997, p. 353). Additionally, according to Kövecses (2014), the influence of linguistic and sociocultural knowledge in the formation of figurative expressions can lead to differences in the lexical level, even in the presence of similar cognitive processes.

The main conclusion of this research is that unawareness of the conventional metaphorical lexicon can turn the translation process into a more complex one. Theoretically, the linguistic structure leads to the conceptual metaphor – the learners' choices confirm this assumption –, however, even in the face of similar conceptual systems, it's important for learners to realize that not all lexical choices are widely accepted by a language community and may not be appropriate in every context.

This assertion supports Philip's (2010) viewpoint on the importance of phraseological and collocational patterns in expressing a conceptual arrangement. However, Philip argues that imprecise linguistic knowledge could result in unclear conceptual understanding. As the data showed us, linguistic imprecision can lead to an intelligible conceptual projection. The use of an unusual vocabulary could lead to collocation incongruences (Philip, 2010), which can cause semantic issues. Nevertheless, if a learner uses conventional metaphorical phraseology, they can automatically access the conceptual system of a language without any negative impact on their understanding. Therefore, although conceptual influence and metaphorical competence are important factors in learning a foreign/second language (Danesi, 1994, 2008; Littlemore; Low, 2006a), they are not enough conditions to produce conventional linguistic forms (Philip, 2010).

The findings of this research ratify Philip's observation that not knowing the association patterns of a word is the most responsible factor for incongruent constructions in other languages. They also ratify Boer's (2001) statement that understanding the conceptual struc-

ture doesn't necessarily affect conventional linguistic realization. In a parallel with the idiom principle (Sinclair, 1991), the more a learner is exposed to the conventional phraseology of a language, the more likely they are to internalize the phraseological structures of that language. As a result, they can access the conceptual system spontaneously, which enriches their linguistic and metaphoric competence, and improves their daily use of the language, whether in oral communication or translation.

The phraseological repertoire analyzed legitimates a learner profile that has an innocent view (Fillmore, 1979) of lexis conventional aspects (Tagnin, 2013, Orenha-Ottaiano, 2004; 2009; 2012). The research highlights a gap in the teaching of foreign/second language and translation, namely the need to focus on developing a curriculum that prioritizes the phraseometaphorical lexicon based on linguistic evidence. This is particularly relevant for Brazilian translator learners. Thus, the study emphasizes the importance of teaching conventionality in translation and calls for pedagogical solutions to improve the phraseometaphorical competence of learners.

## 5 Final remarks

This paper explored the findings of a study whose goal was to evaluate how learners react to the translation of metaphorical phraseologies. It focused on identifying similarities and differences in the mapping conditions between the Portuguese and English language, as well as examining the conventionality of the lexicon-semantic choices proposed, to see if these factors would cause difficulties in translation. The results showed that the conceptual aspect was less problematic, as the learners were able to identify the metaphors and keep them in the target language. Phraseologies with SMC (Similar Mapping Condition) accounted for 86% of the translations. On one hand, phraseologies with SMC and DMC (Different Mapping Conditions) guaranteed conventional linguistic realization in 50% of the translations. Conversely, the preservation of the metaphor was not always achieved at the norm level, as 42% of the translations were classified as less or non-conventional metaphorical phraseologies. In summary, the learners were able to retain the semantic-cognitive unit, but the main challenge was linguistic.

The lexicon-metaphorical composition of the translations is explained by the positive or negative influence of the mother tongue. This influence affects both the cognitive and linguistic-cultural aspects. The translator might use a conceptual and linguistic metaphor that exists in the target language, based on the structure of the source language. This is due to the cognitive-linguistic and cultural similarities between the two languages. Alternatively, the translator might keep the metaphor but use an uncommon wording. It can be concluded, therefore, confirming what was reported by Boers (2000) and Philip (2010), that understanding conceptual knowledge is not enough. It is equally important to understand how the lexicon is associated with conventional phraseological patterns while communicating in a foreign language. Otherwise, there is a risk of creating semantic problems due to lexical choices that are not commonly used in the target language.

As reported, the cognitive translation hypothesis establishes that differences in the mapping conditions can make translation difficult (Mandelblit, 1995). When evaluating metaphorical phrases, the research did not confirm the original hypothesis. Instead, it showed that

difficulties in translation, caused by the use of less common or unconventional lexicon, may not be due to different mapping conditions, as they take place even within a similar mapping condition. The research focused on the translation product, not on the time that learners spent on translation. Based on the cognitive translation hypothesis and subsequent works, an organogram with translation schemes was created. This organogram was used to examine the mapping conditions, linguistic implementation, and conventional characteristics of phraseologies, which helped identify translation tendencies.

The phraseometaphorical competence of translator learners can be improved by corpora as a tool for teaching metaphorical phraseologies. This can be achieved by using platforms like the one used in this research. The data-driven learning approach (Boulton, Tyne, 2013; Johns, 1991) can also be helpful and can promote learning autonomy in students, allowing them to explore corpora with guidance from their teacher. By analyzing concordance lines, students can identify word patterns and discover which words commonly go together in metaphorical contexts. They can compare their own intuitions with what is revealed by corpora. Authors such as Boers (2000), Charteris-Black (2002), Danesi (1994, 2008), Littlemore and Low (2006a), have made valuable contributions to the study of metaphor and can provide insights on how to implement a lexicon-metaphor based curriculum in the classroom. However, further research is needed to develop and deepen our understanding of this subject.

## Supporting Agencies

I am grateful to the Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES) for funding this research through the Proex and Print programs. I am also thankful to the School of Education and Lifelong Learning at the University of East Anglia for waiving the school fees, which made it possible to develop this research during my PhD exchange program.

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