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The Cognitive Turn in Metaphor Translation Studies: A Critical Overview

Wenjie Hong Université Grenoble Alpes France

Caroline Rossi Université Grenoble Alpes France This is an accepted manuscript published in *Journal of Translation Studies* 5(2) (2021, New Series), 83–115

Abstract

Metaphor translation has been a matter of concern in translation studies because its interlinguistic transfer can be impeded by cross-cultural and crosslinguistic differences. Since the inception of Conceptual Metaphor Theory (CMT), which focuses on the conceptual structure of metaphorical language, a range of studies have emerged to investigate metaphor translation from a cognitive perspective, presenting an eclectic mix of research questions and methodologies. This paper is targeted at illustrating what the cognitive approach has offered to translation studies by providing a critical overview of recent research in metaphor translation from a cognitive perspective. It is pointed out that cognitive theory can get to the heart of metaphor, an essential cognitive device for meaning-making, as well as translation, a cognitive activity. Illustrations from the literature show that a cognitive approach can account for in-depth conceptual transfer in the analysis of product- and process-oriented metaphor translation. The cognitive approach also provides important insights into translation as cross-cultural communication by offering a redefinition of culture. Within this context, the paper provides multilingual illustrations while paying special attention to translation between culturally-distant languages, e.g. English-Chinese and French-Chinese translation. Lastly, it is argued that there is potential in combining cognitive theory with translation theories such as Descriptive Translation Studies and the Interpretive Theory of Translation.

Keywords

metaphor translation, conceptual metaphor, cognitive approach to translation, translation studies, cognitive linguistics

1. Introduction

Investigating metaphor is a continuing concern within philosophy, rhetoric, linguistics, and translation studies (TS), as well as other disciplines related to language and thought. When metaphor is addressed in TS, things become even more intricate because the challenges of dealing with one language are "at least doubled—if not squared—when two languages come into play" (Rojo 2015, 721). As a result, translators will "suffer" twice when tackling metaphors: they must first have a sound grasp of the meaning of metaphors in the source text (ST) and secondly find equivalent meanings with similar functions in the target text (TT) (Al-Zoubi, Al-Ali, and Al-Hasnawi 2007, 230). Thus, approaching metaphor translation tests the validity and applicability of different translation theories. Further, since metaphor entails a complex interplay of numerous linguistic and extra-linguistic factors, it appears to be an ideal research ground for translation theorists to venture into.

Before the 1990s, the issue of metaphor translation was mainly addressed by linguistic approaches (Nida 1964; Dagut 1976; Newmark 1981) and textual approaches (van den Broeck 1981; Mason 1982; Snell-Hornby 1995; Menacere 1992; Alvarez 1993; Toury 2012). Whereas in traditional approaches metaphor was thought of as an exceptional use of language, a cognitive approach argues that metaphor is not a matter of language but should be best understood as a conceptual device that allows one to understand and reason about abstract concepts and experience (Lakoff and Johnson 1980), which, when applied to TS, can provide a more realistic prospect of metaphor translation that "reflects the true nature of metaphor" (Samaniego Fernández 2011, 262). The past two decades have witnessed a dramatic growth of research interest in metaphor translation from a cognitive perspective (Samaniego Fernández 2002; Schäffner 2004; Samaniego Fernández, Velasco Sacristán, and Fuertes Olivera 2005; Vandaele and Lubin 2005; Schäffner and Shuttleworth 2013; Kövecses 2014; Hanić, Pavlović, and Jahić 2017; Massey and Ehrensberger-Dow 2017). It is here necessary to remark that the above-mentioned approaches are not meant to be mutually exclusive; quite the opposite, in numerous studies they are used in a combined way, because

logically, given the multifaceted nature of metaphor, any attempt to give a full account of metaphor translation requires careful scrutiny from more than one angle. For example, Dickins's (2006) two models for metaphor translation analysis involve the integration of a cognitive theory of metaphor with a taxonomy from linguistic approaches and textual considerations.

In an effort to bring together the main implications of a cognitive approach for metaphor translation studies, the present paper has been organized in the following way. The next section sketches out previous work on metaphor translation from a traditional view, focusing on two main research questions: translatability and translation procedures. Section 3 presents the theoretical dimension of a cognitive approach to metaphor and analyzes to what extent it has reshaped our conception of language and translation. Section 4 is concerned with elucidating how a cognitive approach has been and can be applied to metaphor translation studies: illustrations from product- and process-oriented research are discussed, before moving on to pedagogical applications. The last section is devoted to a discussion on the limitations of a cognitive approach and the potential combination with other relevant theoretical frameworks.

2. Metaphor in TS: What Were We Concerned With?

Compared with the close attention that metaphor receives as an ornament of language in the field of rhetorical studies (Whately 1861; Richards 1936), metaphor was hardly investigated in TS before the 1970s. Dagut (1976) laments the lack of interest in metaphor by translation theorists and therefore calls for a systematic discussion of metaphor translation. Over the past four decades, metaphor has grown to attract burgeoning interest from translation scholars and to be recognized as a translation problem that requires special attention rather than being simply equated with a figure of speech. According to Schänaffer (2004), two major issues in traditional metaphor translation studies have been the translatability of metaphor and metaphor translation procedures.

(a) Translatability of Metaphor

The translatability of metaphor constitutes one of the earliest and major points of disagreement in metaphor translation studies. Here translatability is to be interpreted as the possibility of being translated word by word. On this point, there are three positions: untranslatable, fully translatable and conditionally or partially translatable, i.e., degree

of translatability is subject to a range of variables (Samaniego Fernández 2011).

Scholars (Kloepfer 1967; Reiss 1971) taking a full-translatability stand claim that metaphor is a universal linguistic phenomenon whose underlying imagination mechanism is a shared property of mankind, i.e., across all speech communities. Hence metaphor can be easily translated literally and there is no need for additional attention to metaphor translation. This assertion, though overly simplistic, still provides an interesting conception of language insofar as it brings to light common ground for languages and human cognition. Yet both Kloepfer and Reiss's view greatly downplay culture-bound specificities of metaphor and language.

For Nida (1964, 220), metaphors "must often be translated as nonmetaphors" because particular semantic extensions metaphors have no equivalent in the target language. Since metaphor cannot be translated literally, it has to undergo some adjustment or alteration. It seems that Nida's assertion values individual aspects of each linguistic community over the universality of languages. This is a major exception to Nida's translation theory, which is mainly based on the postulate of language universals: "Anything that can be said in one language can be said in another, unless the form is an essential element of the message" (Nida and Taber 1982, 4). As metaphors are viewed as a figure of speech whose importance lies in the linguistic form and aesthetic function stemming from them, the translatability of metaphor is jeopardized.

Scholars who hold that metaphor is conditionally translatable assert that translatability or untranslatability is not an invariable property intrinsic to metaphor but depends upon a variety of linguistic and extra-linguistic factors. Dagut (1987), for example, based on a contrastive analysis of some excerpts of a Hebrew novel and its two English translations, states that the translatability of a metaphor is severely restricted by lexical and cultural specifics. It is noteworthy that, though being critical of narrowing metaphor to a mere embellishment of speech, Dagut, too, takes an extremely narrow definition of metaphor. He describes metaphor as an "individual flash of imaginative insight" (Dagut 1976, 22). When addressing the translatability of metaphor, he only takes into consideration the original metaphor, or, what he calls "proper metaphor," because dead metaphors, or, "metaphorical derivatives," can be easily translated by searching for equivalents in bilingual dictionaries. Mason (1982, 149), too, agrees that while some metaphors can be directly translated others cannot because of cultural differences.

Besides the cultural connotations of metaphor, textual factors might also have a

bearing on the translatability of metaphor. Van den Broeck (1981, 84), for example, sets great store by textual aspects: "...translatability [of metaphors] keeps an inverse proportion with the quantity of information manifested by the metaphor and the degree to which this information is structured in a text"; that is to say, the more a metaphor interweaves with various levels of the ST, the less it can be rendered into literal language. This argument can be exemplified by poetic language, where the use of metaphors suggests specific semantic relationships within them and echoes the theme of the poem. Following Van den Broeck's relative-translatability arguments, Snell-Hornby (1995, 58) adds: "[W]hether a metaphor is 'translatable'...must depend on the structure and function of the particular metaphor within the text concerned."

The issue of translatability is not exclusive to metaphor translation studies, but is a long-debated topic of TS in general. Ultimately, polarized views on the translatability of metaphor and STs embody two opposing conceptions of language: the monadist one and the universalist one. Overall, the debate on the translatability of metaphor can be viewed as an expression of translation scholars' obsession with a perfect all-level translation equivalence: ideally, metaphor is supposed to be translated word for word without undermining semantic and cultural content as well as potential communicative function. However, as it is generally accepted that losses are inevitable in translation, the demand for equivalence is heavily criticized in TS. Contrastive approaches thus became less popular at the turn of the century. The discussion about the translatability of metaphor, too, fades out from TS after the 1990s.

(b) Prescriptive Versus Descriptive Approaches to Metaphor Translation Procedures

The idea of prescriptive models for metaphor translation is to propose a series of generalizable translation rules. Newmark (1981) provides a list of procedures for metaphor translation, as summarized below, with examples provided by Newmark and completed by the authors:

- i. Reproduce the metaphor, e.g., 一線希望 *yixian xiwang* in Chinese, *lueur d'espoir* in French, ray of hope in English.
- ii. Replace the metaphor with an acceptable equivalent, e.g., 搖錢樹 yaoqianshu ("money tree"), vache à lait ("dairy cow"), cash cow.

- iii. Translation by simile, e.g., 唇齒相依 *chunchi xiangyi* ("lips and teeth depend on each other"), to be mutually dependant as lips and teeth.
- iv. Translation by simile plus sense, e.g., 他是隻老狐狸 *ta shi zhi laohuli* ("He is an old fox"), He is as sharp and cunning as a fox.
- v. Conversion to sense, e.g., 樹大招風 *shuda zhao feng* ("tall trees attract the wind"), those in high positions are liable to be attacked.
- vi. Deletion.
- vii. Same metaphor combined with sense, if the translator wishes to enhance the power and the clarity of the metaphor.

(Newmark 1981, 88-91)

Newmark's guidelines have been taken up by other scholars for the textual analysis of metaphor translation (Alvarez 1993; Bojović 2014; Oliynyk 2014). Nonetheless, it has received more criticism than support because the proposed strategies are neither justified nor applicable (Maalej 2008; Samaniego Fernández 2011). Similarly, a set of metaphor translation strategies are suggested by Jamet (2003), who went further to contend that an acceptable metaphor translation should achieve four types of equivalence: denotative, collocative, stylistic, and connotative. Still, this recipe for metaphor translation remains a mere theoretical possibility behind which lies preestablished static criteria for translation quality. Prescriptive models, be they used for guiding translation practices or with a pedagogical purpose, can hardly account for actual translation occurrences, which exhibit a certain degree of flexibility and uncertainty.

Counter to the prescriptive approach to metaphor translation, adherents of descriptive translation studies (DTS) are concerned with finding regularities in translation (van den Broeck 1981; Snell-Hornby 1995; Samaniego Fernández 2011; Toury 2012). Van den Broeck (1981, 77) argues that "the theory of translation cannot be expected to specify how metaphors *should* [italics in original] be translated. What it can attempt, then, is to set up models according to which observable phenomena can properly be described." The author distinguishes three possible metaphor translation solutions: (1) translation "sensu stricto," i.e. literal translation (2) substitution, and (3) paraphrase (ibid.). Similarly, Dobrzyfiska (1995) distinguishes three options that the

translator might have when confronted with metaphor: translation into the exact equivalent ($M \rightarrow M$), replacement by another metaphor with similar meaning ($M_1 \rightarrow M_2$), and paraphrase ($M \rightarrow P$).

For Toury (1985, 28), translational problems are supposed to be "reconstructed through *target-source comparison* rather than on the basis of the source text alone." Previous attempts to establish metaphor translation models were merely positioned at the ST pole, thus lacking an organized account of metaphors in the ST and their treatments in TT as one unit (Toury 2012, 107–109). Therefore, based on van den Broeck's model, Toury (2012, 108–10) adds another three scenarios: (4) metaphor into 0, (5) non-metaphor into metaphor and (6) 0 into metaphor. The first one is a complement to solutions observed from ST while the last two are identified from a TT-oriented approach. Another point of criticism against the ST-oriented approach is that proposed translation guidelines are based on isolated examples of the authors' choice, presented as prototypes of potentially problematic metaphors along with *a priori* value judgments. Consequently, it fails to give a realistic account of translation behaviors that are, in fact, subject to particular circumstances (Toury 2012, 107).

Since its appearance, the framework of DTS has generally been adopted by scholars, although not always with a clear reference to DTS as such. However, the use of a descriptive approach alone does not suffice if we are to do justice to metaphor as a mode of thought and the complex interaction of factors involved in metaphor interpretation and translation.

3. A Theoretical Turn in Metaphor Studies

(a) A Redefinition of Metaphor and Translation

Initiated by Lakoff and Johnson in their seminal work *Metaphors We Live By* (1980) and developed by other cognitive linguists (Lakoff 1987, 1993; Lakoff and Turner 1989; R. W. Gibbs 1994; Kövecses 2004, 2005), the cognitive approach to metaphor leads to a fundamental paradigm shift for metaphor research. From a cognitive perspective, the human conceptual system is "fundamentally metaphorical in nature" (Lakoff and Johnson 1980, 3), hence metaphor is not a matter of language, but constitutive of human cognition. The way we think, act, and experience the world is largely structured by metaphor. However, as our conceptual system functions automatically without our being aware of it, one way to grasp its metaphoricity is to look at metaphor use in languages.

Counter to the rhetorical account of metaphor as an exceptional use of language serving to enhance the beauty of speech (Whately 1861; Stern 1931), a cognitive approach lays emphasis on the ubiquity of metaphor in everyday language. Metaphor is grounded in embodied experience and consists of cross-domain mappings from source domain to target domain,¹ permitting us to better understand and reason about abstract concepts in terms of more concrete ones. By way of illustration, the very idea of a verbal battle is structured by a conceptual metaphor, "argument is war," which is represented linguistically in a range of metaphorical expressions:

- i. He attacked every weak point in my argument. 他*攻擊*我觀點中的每一個弱點。
- ii. I've never *won* an argument with him.和他爭論,我從來沒*贏*過。

(Lakoff and Johnson 1980, 4; Lakoff and Johnson 2015, 2)

Thus, a cognitive approach makes a distinction between metaphors (argument is war), i.e., cross-domain mappings in the conceptual system, and metaphorical expressions ("He attacked every weak point in my argument"), i.e., the linguistic realizations of such mappings (Lakoff 1993, 203). The distinction is of vital importance to metaphor translation studies. As has been shown above, linguistic approaches have indeed provided important insights and prepared the ground for subsequent research, but they have been carried out on linguistic realizations of metaphors and fail to take into account their conceptual layer. What is traditionally referred to as *metaphors* would be more properly called *metaphorical expressions* or *linguistic metaphors*.

As a result of languages being thought of as concrete manifestations of the specific functioning of conceptual systems underlain by metaphorical thinking, translation is not about matching linguistic codes, but mapping conceptual systems (Maalej 2008). For Lewandowska-Tomaszczyk (2010), patterns of conceptualization of the ST are constrained by SL conventions and translators have to, unavoidably, perform a reconceptualization of the ST message so as to adequately fit the intended meaning to the TL conceptual system. Accordingly, a major challenge encountered by translators lies in conceptual asymmetries, i.e., the gap between different ways of conceptualization of reality, which gives rise to different conceptual metaphors. Mandelblit (1995) contends

that it is therefore essential to distinguish two scenarios: similar mapping conditions (SMC), where the ST conceptual metaphor has a counterpart in the SL, and different mapping conditions (DMC), where such counterpart does not exist. However, as is discussed above, a conceptual metaphor can be associated with a variety of metaphorical expressions and both are indispensable for metaphor analysis so that SMC and DMC might not undertake a full account of all possibilities. Following this line of thought, Al-Zoubi et al. (2007) compare metaphorical proverbs and verses in English and Arabic and suggest a more detailed pattern comprising comparison at both linguistic and conceptual levels:

- i. SMC with a similar linguistic realization
- ii. SMC with a different linguistic realization
- iii. DMC

This framework may lead one to think that when SMC occurs, metaphor can be adequately translated word by word. However, empirical evidence proves that in real translation occurrences, this may not be as straightforward as it seems (see Section 4). It follows that metaphors present translators with two challenges: one situated at a conceptual level, the other at a linguistic level. It remains to be seen how they are associated with cultural factors—a major obstacle to be reckoned with in translation and which one of the challenges is more prominent.

(b) Metaphor, Cognition, and Culture

Numerous translation scholars, whichever paradigm they set their research within, have subscribed to the belief that culture is of primary importance in translation. Metaphor, for Arduini (1998, 196), reveals the close interrelationship between language and culture. For Nida (1964, 161), the cultural gap is even more difficult to manage than linguistic differences. Snell-Hornby (1995, 56) suggests that "the essential problem posed by metaphor in translation is that different cultures, hence different languages, conceptualize and create symbols in varying ways, and therefore the sense of metaphor is frequently culture-specific." In the same vein, Dobrzyńska (1995, 598) asserts that metaphor interpretation is culturally bound, and cannot be realized by mere linguistic transcoding. Therefore, it is suggested that translators should not only be bi-lingual but also be bi-cultural (Al-Zoubi, Al-Ali, and Al-Hasnawi 2007).

Given that metaphor translation—and translation in general—involves two different languages and cultures, the translator constantly sees himself or herself torn between the SL and TL cultures. Mason (1982), for example, advocates for a maximal faithfulness to the SL culture in literary translation and reckons that the originality and cultural content carried in ST metaphor should be preserved in the TT. However, Dagut (1987) points out that translation that overly adheres to SL norms and cultural values might end up as an ethnographic sourcebook, thus diminishing the readability of the translated work.

The cognitive approach has, since its appearance, made a profound impact on the conception of metaphor and reigned in metaphor research. Nevertheless, critics have argued that it overemphasizes universal aspects of metaphor and can hardly account for cross-cultural metaphor variation (Fernandez 1991; Shuttleworth 2011; Schäffner and Shuttleworth 2013). In point of fact, however, cognitive theorists take a much broader perspective with regard to culture, and one that includes variation. Lakoff and Johnson (1980, 181) contend that metaphorical concepts can vary across cultures. Gibbs (1999, 155) went further, arguing that metaphorical thinking is not an individual conceptual operation in someone's mind but reflects the workings of a whole collective cultural model: "[E]mbodied metaphor arises not from within the body alone, and is then represented in the minds of individuals, but emerges from bodily interactions that are to a large extent defined by the cultural world."

Thus, it is essential to acknowledge that culture plays a defining role in shaping metaphorical thought (Gibbs 1999, 153). Overall, cognitive theorists have brought culture up to a macro-level; that is, culture is not limited to literary traditions, religions or ethnical values unique to a speech community, but reflects a specific conceptual system by which members of the community conceptualize the reality, as stressed by Gibbs (1999, 156): "[W]hat is cognitive (and embodied) is inherently cultural." Consequently, culture talk should not be confined to literary and religious texts favored by translation theorists when addressing cultural factors in metaphor translation (Nida 1964; Dagut 1976; Mason 1982; Menacere 1992; Alvarez 1993), but, as suggested by Lakoff and Johnson (1980) and Gibbs (1999), extended to ordinary language.

As for culture-specific metaphors, metaphor variation theory (Kövecses 2004, 2005) emerges as a powerful explanatory framework to complement the basic arguments of conceptual metaphor theory. Kövecses argued that universality and

variation of metaphors arose from *pressure of coherence* (2005, 237); that is, speakers tend to be coherent both with their bodies and the surrounding context" (2014, 29) when conceptualizing the world metaphorically. While the body and the existence of conceptual systems are universal, which accounts for (near) universal metaphors, contexts may vary considerably, which gives rise to metaphor variation. Metaphor can be broken down into various aspects, all of which are involved in metaphor variation. These aspects include source domain, target domain, experiential basis, relationship between the source and target, metaphorical linguistic expressions, mappings, entailments, non-linguistic realizations, blends, and cultural models (Kövecses 2005, 117). Further, it is necessary to distinguish different dimensions of metaphor variation that most likely occur: cross-cultural variation, within-culture variation, and individual variation.

From a cognitive standpoint, a fair number of contrastive studies, albeit usually without a clear reference to translation studies, have revealed that metaphor use across languages presents both universal aspects and culture-specific features, and brought to light potential challenges for metaphor translation (Hiraga 1991; Yu 1995, 2003; Deignan, Gabrys, and Solska 1997; Semino 2002; Deignan 2003; Kövecses 2004; Lee 2006; Ureña and Tercedor 2008; Ding 2009; Amouzadeha, Tavangar, and Sorahia 2012; Safarnejad, Ho-Abdullah, and Awal 2014).

Among the most commonly cited and particularly noteworthy studies is, for example, the significant discussion and analysis on the cross-linguistic conceptualization of anger. Lakoff and Kövecses (1987) point out that the conceptualization of ANGER in American English is largely structured by the conceptual metaphor ANGER IS HEAT comprises two sub-versions: ANGER IS FIRE and ANGER IS THE HEAT OF A FLUID IN A CONTAINER. The same cognitive model has been demonstrated to be as dominant in Hungarian (Kövecses 2004), Chinese (Yu 1995), Zulu (Taylor and Mbense, 1998), and Japanese (Matsuki 1995), but also constrained by specific cultural models. For example, Chinese differs from English in the use of the second sub-version: in Chinese, the target domain FLUID is replaced by GAS. It is suggested that Chinese medicine theories (*vin-yang* and five elements) might have had an impact on the Chinese conceptualization of ANGER (Yu 1995). In a recent large-scale study investigating cross-linguistic variation and universal structure in emotion semantics, Jackson et al. (2019) used the colexification approach, i.e., by looking at semantically related concepts that are designated by the same word, to

examine semantic networks of twenty-four emotion concepts from 2,474 spoken languages. The analysis shows that, on the one hand, valence and physiological activation play a central role in shaping the colexification patterns of emotion concepts in virtually all languages, and on the other hand, twenty language families manifest wide variation in emotion semantics. For instance, the concept of "anger" co-lexifies with "envy" among Nakh-Daghestanian languages, but among Austronesian languages, it is more related to concepts such as "hate," "bad," and "proud."

The conceptual metaphor theory has also been applied to the comparison of metaphorical idioms in English and Japanese by Hiraga (1991, 160), who states that "[when] two cultures have different metaphorical concepts and express them in different metaphorical expressions...it is difficult to communicate cross-linguistically." He further argues that metaphor can serve as an analytical parameter of underlying modes of thought in different cultures (Hiraga 1991, 162). Close cross-linguistic comparison of metaphorical expressions and the conceptual metaphor TIME IS MONEY in English and Hungarian reveals that, in the most frequent case, a conceptual metaphor is shared by two cultures but realized in different linguistic expressions under the influence of cultural factors, which constitutes, according to Kövecses (2014, 31), "an important source of difficulties in translations involving the corresponding expressions." In a study of marriage metaphors in Bible translation, Stienstra (1993) illustrates that it is the linguistic representations of metaphors that are culture-embedded rather than metaphors *per se* (as cited in Schäffner 2004).

Now that it has been shown that cross-linguistic metaphor variation occurs both at a conceptual level and a linguistic level—with the latter even more culturally marked, which presents translators with major challenges—it is important to ask how translators deal with these challenges and how a cognitive approach can be applied to metaphor translation analysis.

4. Applying a Cognitive Approach to Metaphor Translation Analysis

(a) Product-oriented Research

As is shown above, the non-cognitive approach centers around metaphor change at a linguistic level, thus failing to reveal a deeper layer of metaphor as a conceptual device. The cognitive approach provides a new dimension for metaphor translation analysis, that of conceptual mapping, and makes it possible to consider metaphor translation regularities in a renewed way. Through a corpus-based inquiry of FEAR metaphors in

English and Chinese, Ding et al. (2010) found that the number of metaphors is reduced in TTs and that a metaphorical expression is not necessarily rendered into the equivalent one even when the metaphor is shared by the SL and TL. What determines if the same metaphor is preserved in the TT is its entrenchment ranking in the TL, i.e., the less the metaphor is entrenched in the TL, the more it tends to be dropped in translation, either translated into paraphrase or replaced by a higher-ranking metaphor. Dickins (2006) has also observed a tendency of "downtoning" metaphors in Arabic-English translation of newspaper texts. One possible reason is that, according to the Dickins (2006, 250), Arabic has a greater tendency than English towards metaphorical exuberance, i.e., a high density of metaphorical language, at least in some text types. This finding is consistent with that of Menacere (1992), who observes that Arabic shows a higher metaphorical frequency and density than English. Another possible explanation for this "downtoning" tendency in metaphor translation may reside in the translator's propensity for caution. A similar finding has been reported by Saygin (2001), who used a translation-based task to investigate language transfer in metaphor comprehension. Results indicate that when translating from L1 to L2, subjects produced fewer metaphorical translations than from L2 to L1. It was argued that subjects might feel less confident in the metaphorical language use of L2 than that of L1.

Concerning common tendencies in metaphor translation, a multilingual approach yields some interesting insights. The multilingual approach consists in the use of multilingual corpora to elucidate universal tendencies of translator behavior (Schäffner and Shuttleworth 2013). By analyzing metaphors in self-constructed multilingual corpora consisting of English scientific articles and their official translations into four languages, Shuttleworth (2011) found that translators tend to preserve larger metaphorical mappings and opt for more explicit renderings, i.e., articulate what is implied by the ST metaphor. These tendencies are consistent with the initial findings of Schänaffer's (2004) study of metaphor translation in German-English political discourse: at a macro-level, the conceptual metaphors used in the ST and TT are identical, although at a micro-level their linguistic realizations are not exactly equivalent.

However, some translation scholars sound a note of caution with regard to research on converging trends in translational behavior. Toury (2012, 89) reckons that "a translator's behavior should not be expected to be fully systematic," thus consistency in translational behavior should be viewed as "a graded notion." The same idea is shared by Samaniego Fernández (2011) and Massey and Ehrensberger-Dow (2017), who argue that generalization of translator behavior is problematic because translation is a situated activity subject to a range of *ad hoc* factors. Overall, describing translational behaviors both at a high level of generalization and on an individual basis would be a fruitful area for further work. However, as suggested by Massey and Ehrensberger-Dow (2017), translation scholars should bear in mind the situated nature of translation and interpret research data with caution to avoid making sweeping generalizations.

If corpus-based investigations make it possible to draw conclusions about aggregate patterns of offline metaphor translation, task-based empirical research focuses on online translation and can zoom in on different variables that might have a bearing on metaphor translation, as demonstrated by the above-mentioned study concerning the influence of shifts in translation direction on translators' solutions (Saygin 2001). In a recent analysis of this type, Jensen (2017) focused on another interesting variable, translation competence. To this end, three groups of participants were studied: expert translators (ten years of experience), young translators (two years of experience), and non-professional translators. Comparison of their Danish-English translations of twenty-seven metaphorical expressions extracted from newspaper texts indicates that expert translators showed a marked preference for metaphorical renderings (especially for M-M solution, i.e., preserving the metaphor,), followed by young translators, and non-professional translators at the bottom. As for inclination towards non-metaphorical solutions (paraphrase and deletion), the reverse applied. It is argued that non-professional translators, who have relatively lower translation competence through lack of translation training, interpret metaphorical expressions at a surface level and have a propensity for reductionist strategies, particularly deletion when no immediate translation equivalent is available. Expert translators, however, have higher problem awareness and cross-cultural knowledge, which leads to more sophisticated and measured problem-solving behaviors. Young translators, situated between the two extremes, have more difficulties translating metaphors than skilled translators. They paraphrase more and tend to translate by a different metaphor when unable to find a perfect match, a sign that they are actively interpreting metaphors and developing translation competence and metaphorical competence. One limitation of Jensen's study, however, is that the author has not specified the metaphorical expressions used for the translation task, as to whether they are shared by the SL and the TL or marked by a cultural imprint of the SL. In the latter case, the whole picture might be more complicated.

Massey and Ehrensberger-Dow (2017) reported an analysis of German-English translations of a culture-specific metaphor by professional translators. The results showed that eight out of nine subjects replaced the metaphor with another one, the remaining one being translated by paraphrase. This might be indicative that in the case of highly culture-embedded metaphors, the incompatibility of the source metaphor with the target conceptual system allows little room for a M-M solution. More importantly, a minor modification of experimentation material might lead to radically opposite results. Therefore, for task-based experimental research addressing the implications of different factors on metaphor translation, which is still relatively rare in number, how to single out specific variables and elaborate a practical experiment protocol are key issues to be reckoned with, for the sake of validity.

(b) Process-oriented Research

Most of the studies reviewed so far are product-oriented and provide important insights into metaphor translation through target-source comparison. By contrasting the ST and TT, we can have an idea of what translational treatments of metaphors look like, but we cannot retrace the translator's decision-making process (Schäffner and Shuttleworth 2013, 97). Schäffner and Chilton (2021) further argue that process research can provide more valuable insights into the relationship between metaphor, translation, and cognition. For process-oriented metaphor translation studies, the main concern has been to determine whether metaphorical language translation incurs a heavier cognitive load than non-metaphorical one. As early as 1995, Mandelblit (1995) used reaction time as a measurement of cognitive load to investigate whether metaphor is more difficult to translate in DMC than in SMC. The results showed that in the case of DMC, translating metaphor entails a conceptual shift between the SL and TL, thus leading to an increase in reaction time.

Recent trends in cognitive sciences have led to new interest in metaphor translation from a process-oriented perspective, usually with a focus on cognitive effort. For instance, Zheng and Xiang (2013) questioned whether cultural background can alleviate the cognitive effort invested in metaphor translation, whereas Koglin (2015) inquired into the difference in cognitive load between manually translating metaphors and post-editing machine-translated metaphors. Regarding methodologies, translation scholars have taken on research methods from other empirically-oriented disciplines, notably psycholinguistics, to shed light on cognitive mechanisms of metaphor translation: keystroke logging, eye tracking, and retrospective Think-Aloud Protocols (TAPs), etc. For greater scientific rigor and more reliable results, translation researchers recommend triangulation, i.e., a combination of methods in translation process research (Alves et al. 2010; Schäffner and Shuttleworth 2013).

The combined use of eye-tracking and keystroke logging has yielded important findings. Sjørup (2013), for instance, used triangulated techniques to investigate metaphor translation from English to Danish. Results showed that metaphors facilitate comprehension but pose difficulties in translation. Another noteworthy finding is that cognitive effort also depends on the chosen translation solution, for example, the M1-M2 strategy was found to lead to longer production time than the M-M solution. However, by probing into the English-Dutch translation of complex metaphors,² Massey and Ehrensberger-Dow (2017) reported the converse finding: M-M required greater cognitive effort than M1-M2. It is argued that, since complex metaphors are often culture-specific, attempts to preserve the ST source domain create more production uncertainty. These seemingly contradictory findings show that measured amounts of cognitive effort invested in metaphor translation can be influenced by several variables, including metaphor types (universal or culture-specific), context, familiarity with metaphorical expression, etc. Besides, scholars have suggested that cognitive effort shows considerable variation among individuals (Koglin 2015; Zheng and Zhou 2018). Detailed examination of the relationship between metaphor comprehension and cognitive style concluded that students with a holistic cognitive style may process metaphorical expressions more quickly than those with analytical cognitive styles (Littlemore 2001). In an analysis of metaphor interpretation, Gibbs (2010) asserts that metaphorical language understanding can be shaped by a wide range of individual factors such as sex, social status, political beliefs, and personality, to name a few. These factors deserve closer attention during research design and data interpretation in metaphor translation process studies. Moreover, simplistic generalizations cannot do justice to the complexity involved in such an intricate translation process.

While most metaphor processing studies focus on written translation, few address metaphor processing in oral translation. In order to fill the research gap, Zheng and Xiang (2013) and Zheng and Zhou (2018) examined metaphor processing in sight

translation (STR), a hybrid between interpreting and written translation where the translator reads a text and orally delivers it into another language. STR is self-paced and provides the translator with direct visual exposure to the ST (Agrifoglio 2004), which significantly alleviates memory effort in contrast with simultaneous and consecutive interpreting, but results in an increased risk of linguistic interference and requires high anti-interference efforts (Gile 2009, 181). In line with research findings in written translation, Zheng and Xiang (2013) reported that in STR, metaphorical expressions indeed result in heavier cognitive load than literal ones, which manifests as significantly longer processing time. Moreover, it has been proved that it was the understanding phase rather than the production phase of metaphor translation that brought an increase in cognitive effort. In a recent study, Zheng and Zhou (2018) carried out a more comprehensive analysis of the analytical reading involved in metaphor translation in STR using eye-tracking data. It was shown that over 80 percent of pause time was spent on metaphor processing and that the subjects performed re-reading and reading backward into metaphors when producing an oral translation, indicating that metaphorical language is more difficult to process than literal language. As we can see, process-oriented research can shed light on what source-target textual comparison cannot reveal, i.e., the cognitive burden involved in metaphor translation and the distribution of processing efforts. It lacks often, however, fine-grained analysis of experiment material and data to elucidate where and why exactly extra processing efforts arise and what solutions are brought forward by the translator. Since translation is both a product and a process, mere product- or process-oriented methods are doomed to paint a partial picture. Hence links between product- and process-oriented research should be established; combining corpus and experimental data may be a promising approach (see, for example, Alves et al. 2010).

(c) Cognitive Metaphor Theory for Pedagogical Purposes

Metaphor also plays a key role in structuring human cognition and language, and this central tenet of cognitive metaphor theory has pedagogical implications (Low 1988; Danesi 1995; Deignan, Gabrys, and Solska 1997; Holme 2004; Littlemore and Low 2006a; Hashemian, Reza, and Nezhad 2007; Littlemore 2010; Doiz and Elizari 2013; Danesi 2015; Nacey 2016). The first major discussion about metaphor learning and teaching emerged in the late 1980s with a landmark paper by Low (1988) who proposed a list of skills constitutive of the metaphoric competence that both native speakers and

language learners are supposed to master. The skills comprise, for instance, the ability to construct plausible meanings of metaphorical utterances, interpret and identify metaphorically used words, and awareness of coherent use of metaphors in discourse. Littlemore (2001, 461), however, divides metaphorical competence into four components: "(a) originality of metaphor production, (b) fluency of metaphor interpretation, (c) ability to find meaning in metaphor, and (d) speed in finding meaning in metaphor." In a series of task-based empirical studies exploring the significance of metaphorical competence in language learning and teaching (Littlemore and Low 2006b; Littlemore 2010; Aleshtar and Dowlatabadi 2014), it is shown that metaphorical competence (Littlemore and Low 2006b).

Danesi (1995, 2015) went further and set forth the related notion of conceptual fluency, that is, the ability to "use the conceptual-semantic system that produced figurative discourse systematically" (2015, 145). He contends that metaphorical competence and conceptual fluency deserve as much attention as grammatical and communicative competence have received in language course design. Several empirical studies have lent support to this suggestion (Deignan, Gabrys, and Solska 1997; Hashemian, Reza, and Nezhad 2007; Doiz and Elizari 2013). Deignan et al. (1997) used awareness-raising activities to teach English conceptual metaphors to Polish learners of English and points out that cross-linguistic awareness-raising activities might be a useful approach to help language learners appropriately understand and produce metaphorical language. To better understand the relevance of metaphor awareness to language acquisition, Hashemian et al. (2007) compared the metaphorical density of writings produced by Polish-speaking learners of English before and after a systematic training in the metaphorical language of English. The results showed that post-training writings manifested a similar metaphorical density level to that of native speakers, indicating better performance on writing and higher conceptual fluency after the training.

So far, however, there has been little systematic discussion about conceptual metaphor in the context of translation pedagogy. Nevertheless, a few translation scholars have, albeit briefly, maintained that conceptual metaphor theory and cognitive linguistics might have a crucial role to play in translation training. For Massey and Ehrensberger-Dow (2017, 174), translation is an operation of managing conceptual asymmetries between SL and TL that requires "high-order receptive, transfer, and

productive skills"; teaching translation by systematically incorporating conceptual metaphor and cognitive linguistics might thus contribute to the development of students' reflective competence. Dickins (2006) provides a simplified model for metaphor translation analysis combining both linguistic and cognitive approaches and suggests that competent textual analysis of metaphor translation based on the model can heighten language awareness and lead to better translation. In an empirical study examining the influence of cognitive linguistics input on translation performance, it is shown that novice translators exposed to knowledge of cognitive linguistics produced more metaphorical and creative translations (Hanić, Pavlović, and Jahić 2017). A similar result is reported in a study on the translation of simile-based idioms conducted by Hastürkoğlu (2018), who found that the subjects who had received training on conceptual metaphor theory performed better in the translation task. These studies, albeit on a small scale, have provided prima facie evidence for the effectiveness of conceptual metaphor training in translation courses.

To conclude on pedagogical applications, it is necessary to highlight that integrating knowledge about conceptual metaphor in language teaching and translation training is by no means aimed at simply teaching how to understand or translate metaphorical language. Does a translator have to be a metaphor expert to translate metaphors adequately? Not necessarily. Rather, conceptual metaphor theory might be best viewed as a medium of metaphorical awareness teaching that can lead students to better understand the metaphorical nature of language and discover the underlying conceptual mechanisms that reflect the world view of a speech community. As suggested by Watorek and Wauquier (2016, 10), a core issue in second language acquisition research is to "know to what extent an L2 learner has to reorganize his or her representations of the world in order to express them in another language" (our translation from French).

5. The Limits of a Cognitive Approach

(a) Prescriptive Models in Cognitive Translation Studies

In the preceding analysis, it has been argued that prescriptive metaphor translation procedures proposed by scholars from a traditional view of metaphor failed to do justice to translation as a dynamic process, before or beyond abstract rules. Similar prescriptiveness can also be found in studies using a cognitive approach, as exemplified by the following two studies. Maalej (2008) offers a prescriptive model consisting of a three-step cognitive procedure for translating metaphor between Arabic and English: "unpacking" the ST metaphorical expression into the corresponding conceptual metaphor, comparing the cultures of the SL and TL to determine whether the concerned CM shows SMC or DMC, and "repacking" the ST metaphor into its equivalent linguistic realization in the TT. Leaving aside the pragmatic applicability to authentic translation practice, which requires empirical validation, the model would appear to suggest that metaphorical expressions should be rendered into metaphorical expressions, ideally, those eliciting similar CM. There is no mention of nonmetaphorical solutions. The same idea is more explicitly pointed out by Kövecses (2014), who holds that the optimal translation of a metaphorical expression ought to achieve a three-level correspondence: general meaning (source domain), specific meaning (specific mappings between source domain and target domain), and finally connotative meaning (metaphorical inference of conceptual mappings).

The key problem within studies of this kind is that the proposed translation models are not based on authentic linguistic data but are a theoretical hypothesis. Such prescriptive models imply that translation can be framed by invariable rules, thus turning metaphor translation into a metaphor-substitution game where translators endeavor to achieve optimal mapping both at surface level and conceptual level, and taking us back to the equivalence-searching tradition. The only difference would be that the intended equivalence is no longer situated at a linguistic level but a conceptual one. Accordingly, a cognitive approach to TS should, as suggested by Samaniego Fernández (2011), be combined with Descriptive Translation Studies, which can account for the "true variety of actual occurrences," including divergent translation solutions and translator-related factors, rather than being trapped in an equivalence-searching predicament.

(b) The Problem of Meaning

Translation scholars have identified a myriad of parameters for analysis to highlight online and offline translation patterns of metaphorical language. However, little attempt has been made to address a central notion of TS: namely, meaning. The Interpretive Theory of Translation (ITT) defines translation as a cognitive process that centers around meaning (Seleskovitch and Lederer 1984). More specifically, translation is conceived of as a triangular process encompassing the following interrelated procedures: understanding, deverbalization, and re-expression. The ITT could arguably bring helpful insights into metaphor translation studies, at least in two respects.

Firstly, the ITT postulates that the understanding of meaning is an individual undertaking that hinges on translators' cognitive inputs (*compléments cognitifs*); that is, the translators bring their own knowledge of the world to the source text, and the interplay of linguistic elements and non-linguistic knowledge generates a specific meaning. Likewise, the understanding of metaphors, particularly culture-bound ones, can arguably vary with the translator's stored knowledge and experience about the source culture, which might account for the divergent translation solutions observed in empirical data. Of course, this hypothesis needs to be subjected to empirical verification.

Secondly, assuming that meaning lies at the heart of translation entails integrating semantics in the parameters of analysis in metaphor translation. Thus, addressing metaphors and their translational treatments by looking at conceptual mappings, linguistical realizations and metaphorical entrenchment will not suffice—it needs to be supplemented by an analysis of the shift in meaning. Accordingly, this will portray a clearer picture of metaphor translation and shed light on possible connections between different parameters. For instance, there could be questions about whether translation from L2 to L1 is more likely to result in a semantic shift than the opposite direction.

In an empirical study investigating the influence of cultural asymmetries and translation direction on metaphor translation,³ we found that translation into L2 yielded more deletion of metaphor than translation into L1. Besides, this deletion often led to meaning alteration of ST metaphors.

i. Quand vous sentez la colère vous envahir ...(When you feel the anger invading you...)

ii. 但花錢多的就是咽不下這口氣。
Dan huaqian duo de jiushi yan bu xia zhe kou qi.
(But those who spend more money cannot swallow the anger.)

Both (i) and (ii) make use of conventional ANGER metaphors, "anger is an enemy" and "the body is a container for anger," respectively. All subjects translated (i) into Chinese by substituting the source metaphor, e.g., "anger is a flood." This is probably

because, although Chinese shares with French the metaphor "anger is an enemy," it does not allow the same linguistic realization as French. Nevertheless, the meaning of the source metaphor is appropriately transferred in all translations. Contrary to (i), Chinese and French not only share the container metaphor in (ii), they also have the same verb-noun collocation swallow anger. Our hypothesis was that subjects would reproduce the source metaphor; however, all of them translated by paraphrasing, e.g., 咽不下這口氣 is translated into s'irriter ("get annoyed") or être vraiment énervés ("be really angry"). As a result, and importantly, the meaning of the ST metaphor is altered. Two factors may account for our observations. Firstly, subjects have a stronger awareness of L2 conventional metaphors than L1, especially when the semantic gap between literal meaning and figurative meaning is salient, as in envahir. In this case, we hypothesize that subjects are aware that they are dealing with a metaphor and feel the necessity to opt for metaphorical translation solutions. Secondly, subjects might feel less confident in metaphorical use with their L2 compared with their L1, not to mention linguistic uncertainty in the L2 output. Taken together, students' lack of confidence and uncertainty might account for the observed tendency to avoid metaphors. Of course, translation by paraphrasing does not necessarily result in meaning alteration, but when L1 conventional metaphors are taken as literal rather than metaphorical, underlying semantic nuances cannot be fully unveiled or appropriately restored in TTs.

6. Conclusion

In the above analysis, it has been argued that a cognitive approach, as a theoretical framework that unfolds the true nature of metaphor, improves our understanding of translation as an activity mediating between different conceptual systems. Since each language is pervaded by metaphors that typify a specific conceptual system, addressing metaphor translation means "talking of models of the world, and of how different models, which belong to different cultures, can have a two-way relationship" (Arduini 1998, 195).

Applying a cognitive approach to metaphor translation adds more flexibility to the analysis of real translation occurrences, as it allows for a macro-level conceptual shift. Moreover, it has been demonstrated that translation is a situated and dynamic activity that crystalizes and highlights the intricate interplay of a myriad linguistic and extralinguistic factors. As a result, for empirical studies, it is necessary to take into consideration the interference of different variables, both linguistic (metaphor type, text type, context, etc.) and extra-linguistic (translation direction, socio-cultural conventions, communicative purpose, etc.), in research design and data analysis, in order not to draw reductionist and sweeping conclusions. Finally, to obtain a better picture of metaphor translation, cognitive theory can be combined with insights from Descriptive Translation Studies and the Interpretive Theory of Translation. A combination of a cognitive approach with an in-depth semantic analysis can paint a clearer picture of metaphor translation in its full complexity.

Many more questions, however, remain to be elucidated in future research. For instance, the communicative role of metaphor, which is beyond the scope of the present paper, is viewed by some scholars as an important part of metaphor that requires careful consideration in translation (Menacere 1992; Dobrzyńska 1995). But how the communicative function of metaphor is dealt with in translation is barely touched upon in metaphor translation studies. Over the past decade, a series of publications have been devoted to elaborating Deliberate Metaphor Theory (Steen 2008, 2015, 2017), centered around the intentional use of metaphor in discourse. This theoretical framework, combined with a communicative-functional approach to translation, could make an important contribution to refining a three-dimensional (language, thought, communication) model for metaphor and translation. The part played by individual factors, i.e., translator-related factors such as personality, creativity, and cognitive style, in the translation of metaphorical language also deserves systematic research. In fact, recent studies have emphasized the human-centered nature of translation, calling for more attention to the translator's agency in the translation act (Chesterman 2009; Rojo 2015) and added value in the translation ecosystem in the era of artificial intelligence (Lavault-Olléon 2018; Massey 2021). Finally, it remains to be seen how TS, a discipline that has derived benefits from neighboring disciplines in terms of concepts and methodologies, can contribute in return to metaphor theory (Schäffner 2004), and more generally, to cognitive linguistics and cognitive science (Schäffner and Shuttleworth 2013; Rojo 2015).

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Notes

^{1.} By contrast, another important theorerical framework of CL—blending theory (Turner and Fauconnier 2002)—posits that metaphor does not involve mere unidirectional mappings from one conceptual domain to another but is a result of conceptual blending in different mental spaces, structuted by a complex network of various mappings. It has been argued that blending theory is a powerful explanatory device for complex and creative metaphorical conceptualizations (Grady, Oakley, and Coulson 1999; Kövecses 2010; Benczes 2011).

^{2.} Grady (1997a, 1997b) distinguishes primary and complex metaphors. Primary metaphors are based on recurring correlations in experience, e.g., more is up. In contrast, complex metaphors are not directy motivated by such experiential correlation; they combine primary metaphors, e.g., theories are buildings.

^{3.} The study is based on data collected in December 2019 at Beijing Foreign Studies

University. Twelve MA students in translation and interpreting with L1 Chinese and L2 French (C1-C2 level) participated in the experiment. Preliminary findings were presented at The 5th International Conference on Figurative Thought and Language (FTL5) in October 2020 (see https://ftl5.uni-sofia.bg).