

Translating Technical Metaphors from English into Malay: Possibilities (and Challenges)

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Abstract—“The translation of metaphor (...) is problematic no matter which approach to metaphor is chosen.”

Fuertes Olivera et al (1998:83)

Metaphors are very difficult to define, classify and translate as stressed by Fuertes-Olivera, P. A. et al. (1998) above. Therefore, it is not surprising for the translation of technical metaphors to have its own set of challenges. Translating technical metaphors from English (source language, or SL) to Malay (target language, or TL) requires more than just reformulating the metaphor in one language (i.e. English) as a metaphor in a different language (i.e. Malay). There are two main problems the translator faces in translating the English technical metaphors in to Malay: i) complexities in understanding, interpreting and recreating the technical metaphors that are unique in the SL culture; which have to be explained and described in TL where such practices and customs are non-existent ii) the ST technical metaphors appear in a variety of types and have a distinct denotative and connotative meaning and reference; most often, it is difficult to find a standard equivalent which totally matches the original meaning or concept. Due to these problems most often, the ST technical metaphors are either not translated or translated as a non-metaphor in the TL. This paper discusses the possibilities and challenges of translating technical metaphors from English into Malay using some examples extracted from my PhD research. The technical metaphors were extracted from an English engineering textbook – Holtzapple and Reece and its translated version in the Malay Language (Holtzapple and Reece, 2010, translated by Juneta Zawawi). Analysis reveals that translatability and the choice of TL technical metaphor equivalents is a difficult process and that equivalents are largely determined by 1. linguistic, cultural and technical metaphorical competencies; 2. competency in dealing with the direction of the translation process i.e., whether from L1 into L2 or vice versa; 3. the type of technical metaphor identified in the SL text and 4. The degree of lexicalization and comprehensibility of the technical metaphor. The results reveal that the technical metaphors were either: 1. substituted and translated into a non-metaphor; 2. not translated (i.e. reproduced in the TT exactly as

how it appeared in the ST), and 3. translated as a metaphor but of a different type and class.

(Abstract)

Keywords-translation, technical translation, metaphor translation, technical metaphors, translation equivalence, metaphor translatability

I. INTRODUCTION

The word *metaphor* comes from the Greek word *metaphora* which is derived from *meta*, meaning “over” and *pherein*, “to carry”, and which means to carry or to transfer something. The frequent use of metaphors to assist expression or understanding in technical translation is not unanticipated as “metaphors are found in scientific language and play important part in the formation of concepts” (Pinchuck 1977, p.163). This notion is strongly supported by Mithen (1996) - “the use of metaphor and analogy is one of three critical properties of science” (p. 245) and Christidou et al, (2004) - “central to the formation of social representations of technology is metaphor” (p. 349). From this, we can infer that metaphors also play an important role in the explanation of scientific and technical concepts. They can be used as the substitution of one idea or object with another, and to assist expression or understanding. However, translating technical texts which contain technical metaphors in the professional environment or in scientific communication is more than just handling terminology. Pinchuck (1977) stresses the difference in translating technical and non-technical texts when she says “there is no such thing as a uniform scientific document that is used in all circumstances. Each type of document has its own characteristics, as regards both content and language” (p. 15). Thus, the main challenge of translating technical metaphors lies in grasping the ST author’s scientific meaning and transmitting that scientific meaning which is expressed via a metaphor into another language in the way in which the

translator believes that the would most probably have expressed the content himself or herself, had he or she been a native speaker of the target language.

Bell (1991) stresses this challenging process of translating when he mentions that it is "very clear that the ideal of total equivalence is impossible in translation because languages are different from each other, they have different codes and rules regulating the construction of grammatical forms which have different meanings". (p. 6). Byrne (2006) further highlights these challenges in his statement "the main concern for technical translators is not only to make sure that information is conveyed accurately but they are also responsible for ensuring that the information is presented in the correct form, that it is complete and that the information can be used correctly and effectively" (p. 6). Both Jacobson (1976) and Bassnett (1980) also emphasize this point. Jacobson (1976) believes there are "no exact synonyms between languages" (p. 26). Bassnett (1980) echoes this notion when she states that there cannot be complete equivalence in translation as "each unit contains within itself a set of non-transferable associations and connotations" (p. 15). She explains further that "sameness cannot even exist between two target language versions of the same text" (p. 29).

As such, translating technical metaphors involves more than just replacing the metaphor with its equivalent in another language. Translating technical metaphors from English (source language, or SL) to Malay (target language, or TL) will require more than just reformulating the metaphor in one language (i.e. English) as a metaphor in a different language (i.e. Malay). This paper attempts to discuss factors that influence the choice of technical metaphor equivalents in Malay when translated from English into Malay and highlights the possibilities and challenges of translating technical metaphors from English into Malay using examples extracted from my PhD.

II. THEORETICAL DISCUSSION

A. Translation

Newmark (1981) defines translation as a "craft consisting of the attempt to replace a written message and/or statement in one language by the same message and / or statement in another language" (p. 7). Bell (1991) further accentuates this definition in his interpretation of translation - "to produce as accurately as possible all grammatical and lexical features of the 'source language' (SL) original by finding the equivalences in the 'target language'. At the same time all factual information contained in the original text must be retained in the translation" (p. 13). The definitions though prescriptive in nature above highlight features of translation as either a product (the text that has been translated) or the process (the act of producing the translation). Translation as a process based on Hatim and Munday's (2004) apt interpretation refers to "the role of the translator in taking the original or ST and turning it into a text in another language, the target text TT" (p. 3). Whereas, translation as a product "centres on the concrete translation product produced by the translator" (Hatim & Munday, 2004, p. 6).

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A more comprehensive definition of translation would be from Shuttleworth and Cowie (1997) as their definition incorporates a wider range of areas in translation - "an incredibly broad notion which can be understood in many different ways. For example, one may talk of translation as a process or product, and identify such sub types as literary translation, technical translation, subtitling and machine translation; moreover, while more typically it just refers to the transfer of written texts, the term sometimes also includes interpreting" (p. 183). For the purposes of this paper, the term translation will be used to refer to "a text containing instances of substitution, addition, omission, expansion, or modification and produced on the basis of a source text in the target language in terms of words, meaning, or sentence structure with the main purpose of making the target text suitable for a particular purpose, genre and audience" (Abdullah & Shuttleworth, 2013, 3(6), p. 608).

B. The Translatability of Metaphors

"The crucial question that arises is thus whether a metaphor can, strictly speaking, be translated as such, or whether it can only be 'reproduced' in some way" Dagut, M. B. (1976, p. 24)

As implied by Dagut (1976) above in his article 'Can "Metaphor" be Translated', the translatability of metaphors has always been questioned. The lack of clarity in metaphor makes translating and interpreting its meaning not always easy and straightforward. Newmark (1988) stresses this point in his statement "whilst the central problem of translation is the overall choice of a translation method for a text, the most important particular problem is the translation of the metaphor" (p. 104). In translating metaphors from one language and culture to another, one may be hampered by linguistic and cultural differences between the two (or more) languages concerned. As such, when measured within the context of technical translation, translating metaphors can give rise to various challenges and this is predominantly so if the technical metaphors in the source language are culture-bound. This means, that the translation of the technical metaphor may largely depend on the structure and function of the particular metaphor within the context of a culture (Dagut, 1976, p. 32; Snell Hornby, 1988/1995, p. 58). In short, culture and semantic associations may serve as a stumbling block to the process of technical metaphor translation.

There has hardly been any research on the translation of technical metaphors from English into Malay to date. However, there have been a number of discussions on the translatability of metaphors by prominent linguistics and translation scholars such as Nida (1969), Reiss (1971), Dagut (1976), Van Den Broeck (1981), Kloepfer (1981), Toury (1985 & 1995), Newmark (1988), Snell-Hornby (1988), and Vinay & Darbelnet (1995). Several conflicting arguments or views on the translatability of metaphor emerge from these studies as listed below:

- Metaphors are untranslatable - Nida (1964), Vinay & Darbelnet (1958) & Dagut (1976)

- Metaphors are fully translatable (i.e. metaphor can be quite “simply” translated word for word) - Kloepfer (1981), Reiss (1971)
- Metaphors are translatable but the degree of translatability is dependent on the text type, cultural and linguistic factors – Van Den Broeck (1981), Toury (1985&1995), Newmark (1988a, 1988b)

Interestingly, of the three opposing views presented above, it is rather obvious that view i) would be rejected by many translation scholars today with all the evidence of such a possibility. However, some findings from my PhD research seem to support this particular view of “metaphors being untranslatable”. Analysis of the findings indicated that in translating technical metaphors from English to Malay, there has been some instances where the ST technical metaphors were simply not translated or substituted because of:

- i. the complexities in understanding, interpreting and recreating the technical metaphors that are unique in the SL culture; which have to be explained and described in TL where such practices and customs are non-existent:

e.g.

ST: But because of the defect, the light did not focus properly, thus greatly reducing the light collected and giving star images a “halo”.

“halo” = Image Metaphor

TT: Tetapi oleh sebab kecacatan tadi, cahaya tidak tertumpu dengan betul, oleh itu mengurangkan cahaya yang dikumpulkan dengan banyaknya dan menjadikan imej berbentuk “halo”.

Back Translation:

But as the above defects, the light does not focus properly, thus reduce the amount of light collected and made image-shaped “halo”.

Explanation:

Image Metaphor “halo” is not translated into Malay. Halo’ is a culturally bound SL image metaphor which personifies an image of an angel with a halo which is strongly linked to Christianity. In the Malay culture, the religious beliefs and practice is Islam. In Islam, the existence of angels is acknowledged. But the image and association of a “halo’ to an angel is non-existent as angels are personified differently.

- ii. the SL technical metaphors appear in a variety of types and have distinct denotative

and connotative meaning and reference. These factors make it difficult for the translator to find a standard equivalent which totally complements the SL scientific or technical meaning or concept.

e.g.

ST: The common threads through all these disciplines are fundamental physical and mathematical laws.

threads = Stock Metaphor

TT: Unsur sepunya bagi semua disiplin ini ialah hukum asas fizik dan matematik

Back Translation:

The element common to all of these disciplines are fundamental laws of physics and mathematics

Explanation:

Stock Metaphor “threads” is translated into a non-metaphor i.e. a noun in Malay. In English (SL) the word “threads” can be both a parts of speech (noun or verb) or a figurative word (in this case a metaphor) depending on the context and purpose of the writer in using it. In the sentence above “threads” is a metaphor meaning links /web. Now, in Malay (TL) when translated directly “threads” can only be a noun (benang) with a single definite meaning (a piece of equipment to sew). This is the reason why it was translated into a non-metaphor in the TL. The translator could capture the meaning but could not identify a suitable technical metaphor equivalent as it is non-existent in the TL.

View ii) is on the other hand is clearly inappropriate as it is difficult to comprehend how metaphors which are highly culturally and linguistically bound could be so easily translated “word for word” with ease. Moreover, it has been demonstrated in past and recent translation researches that there can be no 100% equivalence in translation between two or more languages. Finally, view iii) would be deemed as a view closest to reality in actual translation practice as the degree of translatability of the metaphors is dependent on the shared cultural and linguistic traits between the SL and TL involved.

C. *Equivalence in Translation*

The process of finding, selecting and creating an equivalent in the TL is not always an easy task. As a result, translators would have to alter, expand or omit items in their translations all the time. In general, the process of translating an SL is always to identify the suitable equivalents in the TL first. Shuttleworth & Cowie (1997) define equivalence (or

Translation Equivalence) as “the nature and the extent of the relationships which exist between SL and TL texts or smaller linguistic units” (p. 49). These “smaller linguistic units” include levels of equivalents which range from the least significant level of language – that of morpheme - to the more complicated levels like a sentence between the SL and TL. Popovic (1976) categorizes translation equivalence into four (4) main types:

i. Linguistic Equivalence - “homogeneity of elements upon the linguistic [phonetic, morphological, and syntactic] levels of the original and the translation” (Popovic, 1976, p. 6). In short, when there is similarity on the linguistic levels of both SL and TL.

ii. Paradigmatic Equivalence - “equivalence of the elements of a paradigmatic expressive axis upon the stylistic level as a system of expressive elements. This type of equivalent is not identical with “lexical synonymical equivalence as it involves a hierarchically higher stylistic category” (Popovic, 1976, p. 6). This occurs when there is similarity in the grammatical structure of the SL and TL. Shuttleworth & Cowie (1997) further elaborate that “the term paradigmatic is used to refer to the complete expressive system, or in other words, the entire range of expressive possibilities from which the actual terms found in a given text are drawn” (p. 120).

iii. Stylistic Equivalence – “functional equivalence of elements in both original and translation aiming at an expressive identity with an invariant of identical meaning” (Popovic, 1976, p. 6). Also known as Translational Equivalence. Shuttleworth & Cowie (1997) further explain “stylistic equivalence involves preserving the expressive character of (elements of)ST, while at the same time retaining as much as possible of its basic content” (p. 160)

iv. Syntagmatic Equivalence – “arrangement of the elements upon the syntagmatic axis of the text” (Popovic, 1976, p. 6). It is also known as Textual Equivalence. A term introduced by Catford (1965) where the TL text is “observed on a particular occasion ...to be the equivalent of a given SL text or portion of text” (Catford, 1965, p. 27). In other words, occurs when there is equivalence in the syntax (form and shape) structure of both the texts.

It is not surprising that equivalence in translation is described as a “troubled notion” (Hermans, 1995, p. 217) because most translation scholars like Jacobson (1959/1966), Nida (1964/1969), Catford (1965), House (1977), Baker (1992), Vinay and Darbelnet (1995) express their understanding and interpretation of translation equivalence differently. However regardless of the difference in views and interpretations, all unanimously suggest the fundamental role of equivalence - culturally and linguistically in the translation process. The following presents some of these different views and interpretations of equivalence in translation:

Jacobson (1959/1966) introduced the concept of “equivalence in difference” (p. 233). He proposed three types of equivalence in translation:

- i. Intralingual (within one language, i.e. rewording or paraphrase)
- ii. Interlingual (between two languages)
- iii. Intersemiotic (between sign systems)

Nida (1964) on the other hand propose and discussed two different types of equivalence:

i. Formal Equivalence (i.e. where the TL item denotes the closest equivalent of an SL word or phrase – “focuses attention on the message itself, in both form and content” [p. 159]).

ii. Dynamic Equivalence (i.e. where the translator tries to replicate the message of the original SL in such a way that the TL version will produce the same impact and reaction as the original message did in the ST - “the message of the original text has been so transported into the receptor language that the response of the receptor is essentially like that of the original receptors” [Nida & Taber, 1969/1983, p. 200])

In sum, Nida’s (1964) formal equivalence centres on the form or structure of the message. Dynamic equivalence conversely engages with the effects, meaning, and content of the message upon the readers or audience.

In his work, Catford (1965) also talks about two types of equivalence:

i. Textual Correspondence - “any TL text or portion of text which is observed on a particular occasion...to be equivalent of a given SL text or portion of a text” [Catford, 1965, p. 27])

ii. Formal Correspondence – “both SL and TL must be relatable to the functionally relevant features of the situation” [Catford, 1965, p. 94])

He also talks about his notion of shifts – structure shift, class shift, unit shift and intra system shift. Alternatively, House (1977) introduces Covert and Overt Translation to aid fellow translators to retain the “meaning across two languages” (p. 25):

i. Covert Translation (i.e. the TT must be functionally equivalent to the ST – “the TT must be as immediately and originally relevant as it is for the source language addressees” [House, 1986, p. 188]).

ii. Overt Translation (i.e. the TT audience is not directly addressed. Hence, there is no need to recreate a second original – Shuttleworth & Cowie (1997) further explain that in House’s Overt Translation Model “some STs have ‘independent status in the source culture. This means that they are in some ways inextricably linked to the community and culture, being specifically directed at SL addressees. In order to translate such STs appropriately, it is necessary to produce an overt translation” (p. 118) - “when the TT addressees are quite ‘overtly’ not being directly addresses, no attempt is made to produce a ‘second original’: an overt translation must overtly be a translation” [House, 1986, p. 188]).

Baker (1992) distinguished between grammatical, textual, and pragmatic equivalents while Vinay & Darbelnet (1995) stress that the key to solving the numerous translation problems lies in translation equivalence and if applied, the stylistic impact of the SL text in the TL text could be retained. They view equivalence as a technique which reproduces the same situation in the TL as in the original; only with a completely different wording. They also mentioned that equivalence is the ideal method in dealing with figurative languages like idioms, clichés and proverbs. It must be noted however, that this perception when applied now is somewhat old fashioned.

III. POSSIBILITIES AND CHALLENGES

B Identifying equivalence in the translation of technical metaphors discloses somewhat similar problems that are present in literary metaphor translation. Scientific and technical discourse is not totally different from literary discourse; therefore the problems of equivalence and similarity are also present in order to render the full meaning of the technical metaphors. As such, the translatability and the choice of TL technical metaphor equivalents though possible do pose some challenges. The challenges imposed on the translator vary in type and degree of intensity depending on the translators' i) linguistic, cultural and technical metaphorical competencies; ii) competency in dealing with the direction of the translation process i.e., whether from L1 into L2 or vice versa; iii) the type of technical metaphor identified in the SL text; iv) degree of lexicalization and comprehensibility of the technical metaphor. It must be mentioned also that the degree of translatability and identifying TL equivalents for the technical metaphors is also "dependent on the styles of translation procedure or strategies that are being used by the translator and the possibilities that are available to the translator during the translation process" (Abdullah & Shuttleworth, 2013, 3(6), p. 617).

Linguistic constraints include the syntactic, semantic, phonological and prosodic parameters encountered by the translator during the translation process. Jackendoff (1991) states "once one understands the meaning, the syntax follows naturally and automatically" (p. 96). The different word order in SL and TL coupled with lexical incompatibility between SL and TL due to the translator's struggle with difficult scientific or technical metaphorical term will give rise to complexities in understanding, interpreting and recreating the technical metaphors in the TL. Therefore, in order to diminish these particular constraint, the translator should be fully familiar and competent with the SL topic and/or register. Phonological and prosodic constraints are not a critical contributing factor in determining the TL technical metaphor equivalent as it would be more relevant in cases where intercultural oral communication and interpretation is in play. Problem will arise when there is non-existent segmental phonemes (i.e. vowels, consonants, consonant clusters, and diphthongs), suprasegmentals and prosodic features (i.e. stress, intonation, pitch, rhythm and tempo) either in the SL or TL. Cultural

constraints refer to features that are not visually identifiable at the level of form or meaning of language as they are linked closely with the religious, political or social setting of either the SL or TL. Translators will face problems in identifying technical metaphors equivalents that are unique in the SL culture; which have to be explained and described in TL where such practices and customs are non existent; and also because of which no standard equivalent may yet have been arrived at as in the case of English to Malay Translation of Technical Texts.

In addition, the variety of technical metaphor types also contributes to the translatability and difficulty in identifying a suitable equivalent mainly due to the distinct denotative and connotative meaning and reference. It is difficult to find a standard equivalent which totally matches the original meaning or concept. According to Van Den Broeck (1981) "translatability 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" (p. 84). He classifies these translatability specifications into four (4) categories (p. 84):

i) 'private' metaphors in literary texts are more translatable than conventional metaphors because 'private' metaphors are less culturally-bound)

ii) 'decorative' metaphors are more translatable than creative metaphors because

creative metaphors are not so relevant in terms of communicative function.

iii) 'lexicalized' metaphors in referential texts are very translatable.

iv) 'lexical' metaphors with functional relevance in complex texts present a low degree of translatability because they compile a lot of information which is very condensed.

Newmark (1988a) on the other hand, considers "dead metaphors as the most 'translatable'" (p. 48-49) while "stock" and "original" metaphors would show a degree of translatability proportional to the proximity of the two polysystems involved" (1988a, p. 109 & 1988b, p. 49, 106-113). To Alveraz Calleja (1991) however, "cultural metaphors are most difficult to translate" (p. 222-223). In agreement with Van Den Broeck (1981), Rabadan Alvarez (1991a) states "lexicalized metaphors are the most translatable ones" (p. 137). He further adds "stock metaphors are translatable if the systems involved are culturally close while novel metaphors are very difficult to translate" (p. 137). However, Rabadan also stresses that the higher the density of functionally relevant metaphors and culturally - bound items not shared between two cultures the "more difficult it will be to render a metaphor" (p. 146). In sum, according to Newmark (1988a), the most translatable metaphor types would be dead metaphors. Alternatively, Van Den Broeck (1981) and Rabadan Alvarez (1991a) feel that lexicalized metaphors are the most translatable ones followed by novel and stock metaphors.

With reference to the translatability of technical metaphor types from English to Malay technical text; the claims made by the translation scholars above were only relevant to a certain extent. The majority of the technical metaphors only appear in the ST and not in the TT regardless of its type or class. Most of the technical metaphors which were translated in the TT:

i) no longer functioned as metaphor or were substituted - translated into a non - metaphor (Examples 1 & 2):

Example 1:

ST: Watt mula membaiki dan memperbaiki model engine Newcomen di university tersebut. Tidak lama kemudian, beliau mendapati bahawa enjin tersebut amat tidak cekap, lalu beliau mencipta suatu reka bentuk yang akan meningkatkan kuasa dan mengurangkan penggunaan tenaga.

Beast = Original Metaphor

TT: Watt started to repair and improve the model wcomen engine at the university said. Soon, he found that the engine is extremely inefficient, so she created a design that will increase power and reduce energy consumption.

Engin = Noun

Back Translation:

Watt started to repair and improve the model Newcomen engine at the university said. Soon, he found that the engine is extremely inefficient, so she created a design that will increase power and reduce energy consumption.

Example 2:

ST: Newton's Laws are one of the cornerstones of engineering.

Cornerstones = Original Metaphor

TT: Hukum Newton merupakan satu daripada asas kejuruteraan.

Asas = Noun

Back Translation:

Newton's law is one of the basic engineering.

ii) not translated (i.e. reproduced in the TT exactly as how it appeared in the ST) [Example 3]

Example 3:

ST: But because of the defect, the light did not focus properly, thus greatly reducing the light collected and giving star image a "halo".

"halo" = Image Metaphor

TT: Tetapi oleh sebab kecacatan tadi, cahaya tidak tertumpu dengan betul, oleh itu mengurangkan cahaya yang

dikumpulkan dengan banyaknya dan menjadikan imej berbentuk "halo".

"halo" = not translated rather reproduced in the TL exactly as how it appeared in the SL.

Back Translation:

But as the above defects, the light does not focus properly, thus reduce the amount of light collected and made image-shaped "halo".

iii) In addition, not all the technical metaphors retained the same class of metaphors when translated into the TT. The class or type of the metaphor did change for some of the technical metaphors as illustrated in Example 4 below.

Example 4:

ST: The end of the Cold War, (a period of tension between the United States and the Soviet Union following World War II) has dramatically affected engineering

Cold War = Dead Metaphor

TT: Tamatnya perang dingin (tempoh tegang antara AS dengan Rusia selepas Perang Dunia II) telah menjejaskan kejuruteraan dengan teruknya.

Perang dingin = Stock metaphor

Back Translation:

The end of the Cold War (period of tension between the U.S. and Russia after World War II) affected engineering badly.

Explanation:

The stock metaphor 'dingin' to demonstrate a human emotion having similar qualities to the cold icy weather - unfriendly, not talking to each other, the silent treatment, non verbal dispute etc.

It must be highlighted, that based on the very small number examples shown above, the ease of translatability and identifying suitable technical metaphor equivalents is not determined by the type of metaphor rather more inclined towards cultural and linguistic factors. This is mainly due to the SL technical metaphors that are unique in the SL culture which have to be explained and described in TL where such practices and customs are non - existent.as depicted in an earlier section of this paper and again in the examples above.

IV. CONCLUSION

In a nutshell, this paper presents an overview of the possibilities and challenges of translating technical metaphors from English into Malay using a small number examples extracted from my PhD research. It was demonstrated that scientific and technical discourse is not totally different from literary discourse; as such the translatability and the choice of

TL technical metaphor equivalents from English to Malay is possible but not without its challenges. These challenges are a result of the complexities that arise in understanding, interpreting and reconstructing the technical metaphors in the TL due to 1.linguistic constraints syntactically, and semantically; 2.interpreting and recreating the technical metaphors that are unique in the SL culture; which have to be explained and described in TL where such practices and customs are non – existent 3. The SL technical metaphors appear in a variety of types and have distinct denotative and connotative meaning and reference. These factors make it difficult for the translator to find a standard equivalent which totally complements the SL scientific or technical meaning or concept. Therefore it is vital for the translator to also possess a clear understanding and competence in the cultural, social and linguistic features of both the SL and TL technical metaphors.

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