# Investigating the Psychological Reality of Conceptual Metaphors<sup>1)</sup>

## KIKUCHI Atsuko

認知言語学者が主張する「概念メタファー」の心理的実在性を検証した例は数少ない。本 研究は、日英バイリンガル・スピーカーが一つの言語からもう一つの言語へ移行する時の認 知プロセスを見ることによって概念メタファーの心理的実在性を検証する試みである。概念 メタファーに心理的実在性があるならば、日英間で異なる概念メタファーが存在する場合、 翻訳プロセスに何らかの支障を来すはずである。5人のバイリンガル・スピーカーを使って 行った実験の結果、日英間で異なる概念メタファーに基づいた言語表現を訳す場合、日英間 で類似した概念メタファーに基づいた言語表現を訳す場合と比べると、そのプロセスは遅く、 間違い、言い直し、戸惑い等が多く見られる。これは異なる概念の「捉え直し」という負担 がバイリンガル・スピーカー掛かるために起こると考えることができ、概念メタファーの心 理的実在性を証明するものと思われる。

**キーワード** 認知言語学、概念メタファー、翻訳プロセス、バイリンガル・スピーカー

## **0. Introduction**

Cognitive linguists have used the abundant presence of metaphor in language to postulate the idea that our thoughts are fundamentally metaphorical in nature. The question has remained, however, as to whether there exists independent empirical evidence on the psychological reality of the metaphorical nature of our thoughts (cf. Gibbs 2007). What I am presenting here is a preliminary study of how bilingual speakers translate conventional metaphorical expressions. The results of the study provide some empirical evidence to support the claim of cognitive linguists.

The structure of this paper is as follows. Firstly, I will explain briefly about what I mean by the process of translation, and about bilingual speakers who travel between two languages. Secondly, I will discuss how our view of language affects the way in which we view translation. Thirdly, I will introduce the Conceptual Metaphor Theory in cognitive linguistics. Fourthly, I will briefly explain an experiment I conducted using bilingual speakers of English and Japanese. Finally, I will discuss what the result of the experiment suggests.

First of all, by "the process of translation", I mean what bilingual speakers do when they switch from one language to another. When I say "switching from one language to another", I don't mean code-switching that bilinguals do when speaking with other bilinguals, using, say, a few elements of Japanese together with elements of English. I mean the process of putting into one language, something that you heard, read of thought in another language. Bilingual speakers do this all the time, because they are always travelling between two language communities. I am always having to tell my English speaking friends what I heard in Japanese, or vice versa. And I'm sure that many speakers of two or more languages have had many such experiences.

When I say bilingual speaker — I know this is problematic, because there are all kinds of bilinguals, and I will be hedging here — I mean people who have little difficulty in expressing their thoughts in the two languages. Someone who is bilingual is not only capable of using the two languages separately, but is also capable of putting into the second language what was said in the first.

## 1. The Process of Translation

How the process of translation is viewed depends largely on how one views language. Cognitive linguists reject the traditional idea that language is a collection of sentences that are realizations of a set of objective universal meanings. In their view, the process of translation would not merely be a process where the sets of sentences in the source language (SL) are separated from their meanings and then re-encoded into another set of sentences in the target language (TL). Rather, cognitive linguists view language as a reflection of how we conceptualize the world. They acknowledge the significant role played by the language users – particularly the way the language users perceive the world around them. Their main claim is that the conceptual systems of languages arise from, and are shaped by how we conceptualize our experience (cf. Lakoff 1987). What follows from this claim is that translation across language is possible because the experiences we draw upon can be universal or widespread, and human conceptualization of such experiences that are reflected in each language can also greatly overlap.

## 2. Conceptual Metaphor Theory

One of the ways in which we conceptualize our experience is through metaphor. The idea that much of our language is metaphorically structured and that this is a reflection of how we understand concepts was one of the earliest and important claims of cognitive linguistics. In the seminal publication of *Metaphors We Live By*, Lakoff and Johnson (1980) observed that there were many conventional expressions that formed a pattern in which things in one domain were talked about in terms of another domain. For example, we can think and talk about life in terms of a journey.

- (1) a. Look *how far* we have come.
  - b. We are not *making* any *progress*.
  - c. I am at a turning point in my life.

Each of these expressions reflects particular ways in which we think of life. They reflect the metaphorical concept of life as some sort of journey. The LIFE AS A JOURNEY metaphor plays a role in our understanding the concept of life in terms of another concept, journey. Lakoff and Johnson argue that conceptual metaphors such as LIFE AS A JOURNEY arise when we try to understand an abstract or complex concept in terms of a more familiar or more concrete concept. They present convincing evidence to suggest that many expressions such as the ones given in (1) that were treated traditionally as 'dead metaphors' are actually very much 'alive' and play an important function in our understanding of the world around us.

To give another example of a conceptual metaphor in English, arguments are often talked about using words that are used when talking about war.

- (2) a. Your claims are *indefensible*.
  - b. He attacked every weak point in my argument.
  - c. His criticisms were right on target.
  - d. I demolished his argument.
  - e. I've never *won* an argument with him.

Here, 'demolished' does not relate to a physical destruction of an object, so it is not to be understood literally, but figuratively. According to the Conceptual Metaphor Theory, this is because the conceptual domain of ARGUMENT is conventionally structured and understood in terms of the conceptual domain of WAR. The basic premise of Lakoff and Johnson's claim is that metaphor is not simply a stylistic feature of language, but that thought itself is fundamentally metaphorical. According to this view, conceptual structure is organized by cross-domain mappings or correspondences which are stored in the long-term memory of the language user.

As discussed in Kikuchi (2007), Japanese happens to talk about arguments in a similar way to English.

- (3) a. Kare-no itta koto-o koogeki shita He-GEN said thing-DO attack did 彼が行ったことを攻撃した
   (1) attacked what he said'
  - b. Giron-ni *katta* Argument-LOC won 議論に勝った '(I) won the argument'

These expressions are common in Japanese. Because the conceptual structuring of the way we understand arguments overlap between English and Japanese (it is possible that this may come from borrowing), translation between the two languages in this area is relatively easy. However, the cross-mapping between the domain of ARGUMENT and the domain of WAR is not as productive in Japanese as it is in English. For example, the English sentence (2a) renders an awkward expression in Japanese when you use the term *booei* – a term that is used in the WAR domain.

(4) Kimi-no shuchoo-wa *booei* shigatai You-GEN claim-TOP defend can'
? 君の主張は防衛しがたい
? 'Your claim is *indefensible*'

A more natural rendition is (5) below.

Investigating the Psychological Reality of Conceptual Metaphors (Kikuchi)

(5) Kimi-no shuchoo-wa bengo-no yochi-ga nai
 You-GEN claim-TOP defense-GEN room-SUB doesn't exist
 君と主張は弁護の余地がない
 'Your claim is indefensible'

In (5) the word *bengo* 'defence' is not a word that is used in a war context, but a word used only to defend verbally. This does not mean that Japanese speakers, upon hearing sentence (4), would not understand what it means. Having experienced arguments and having the cognitive capacity to see similarities between arguments and war, a Japanese speaker would understand sentence (4) in a way similar to English speakers. The difference is that whereas the use of *indefensible* in English would be considered by an English speaker to be an ordinary expression, the Japanese expression would sound either like a novel metaphorical expression, or would sound rather odd.

Lakoff (1987) writes that each language has its own conventional ways of structuring the experience of its speakers. These conventional ways of structuring form the conceptual system of the language. Since people all around the world share, to some extent, similar experiences and people share the same cognitive faculties, some of the ways in which a language structures particular experiences overlap across languages. But not all such conventional structuring is shared. This creates differences in the conceptual systems of languages. This, however, does not mean that speakers of different languages cannot understand the way speakers of other languages talk about their experience. The reason for this is because we all share the same conceptual capacity and use this capacity to understand the experience that is also largely shared by people around the world. That is, people share a general conceptualizing capacity regardless of what differences they may have in conceptual systems. Differences in conceptual systems do create difficulties in translation. However, it does not follow from the difficulty or impossibility of translation that understanding is impossible.

## **3. Difficulty in Translation**

People who speak two languages usually have the ability to say in the second language, what was said in the first. Even if they have had no training in translating or interpreting, the ability to translate seems to come with the ability to speak two languages. But most bilinguals would agree that there are some expressions that are harder to translate than others. It is not that they don't understand the SL or lack the vocabulary of the TL, but sometimes the SL expression is so peculiar to the SL that it is difficult to think of how to capture the same nuance in the TL.

While teaching a course on translation and interpreting to graduate students at my university, I noticed that many of the expressions that my students had difficulty in translation included conventional metaphors. My personal experience in translating and interpreting also made me think that it was these expressions that often got me stuck in the middle of translation. It occurred to me that perhaps what made the translation of these conventional metaphorical expressions difficult to translate had to do with the way the meanings of these expressions were closely tied with the conceptualization built in the particular language. If the meanings of these expressions were only arbitrarily associated with their forms, there shouldn't be any difference in the difficulty of translation between a conventional metaphorical expression and a non-metaphorical expression.

### 4. The Psychological Reality of Conceptual Metaphors

Lakoff and Johnson (1980) claim that there are many conventional expressions in a language that form a pattern in which things in one domain are talked about in terms of another domain. They claim that these patterns exist because users of the language actually think of one thing in terms of another. However, it has been difficult to prove that such conceptual metaphors really exist in our minds – that these conceptual metaphors are actually used in understanding the relationship between the conventional metaphorical expression and its meaning.

I thought that perhaps by looking at the process of translation I might be able to find some evidence that showed that bilingual speakers used such conceptual metaphors in understanding the meaning of conventional metaphorical expressions. So, I decided to put together a list of conventional expressions in Japanese and in English that I thought were based on some metaphorical mappings across different domains. My prediction was that if the SL expression were based on a conventional metaphor that was not part of the TL, it would be harder to translate than a case where the SL and the TL shared the conventional metaphor. The prediction was based on the assumption that metaphorical expressions are not just linguistic devices but affected the way we conceptualize the meaning of the expression. If we were really understanding the meaning of the conventional expression by mapping across two domains, then the process of translation would not merely be a replacement of linguistic expressions, but would involve a re-thinking, or re-structuring of the concepts. It was predicted that such a process would put more burden on the translator than a case where the translator had to simply find the lexical equivalent.

## 5. The Experiment

First of all, it must be noted that the present experiment was only done on a very small scale as a pilot study. Only five bilingual speakers were used as subjects. As I mentioned earlier, a bilingual speaker is loosely defined as a person who can understand and communicate without much difficulty in two languages. Four of the subjects had Japanese as their stronger language while one had English as his stronger language. None of the subjects were trained translators. Forty-one sentences were pre-recorded onto a tape. Twenty-one of these sentences were in English and twenty were in Japanese. The subjects were instructed to listen to one sentence at a time, stop the tape at the end of the sentence and translate English sentences to Japanese and Japanese sentences to English. The subjects were encouraged to think aloud during the translation process, and their utterances were recorded. The first ten English sentences and the first ten Japanese contained metaphorical expressions but in most cases, the metaphors overlapped between English and Japanese. The next eleven English sentences and the next ten Japanese sentences contained metaphorical expressions that were more language specific. For details regarding this experiment, see Kikuchi (2007).

## 6. The Result

As predicted, where English and Japanese shared similar metaphors, the subjects had little difficulty in translating and there was much uniformity in their translations. When the subjects had to translate sentences where Japanese and English did not share similar metaphorical concepts, there was a noticeable change in the pace of translation. There were longer pauses and frequent back-tracking. There was also notably more moving of the hands. Some of the sentences were chosen because English and Japanese shared similar conceptualizations of the experience, but they differed slightly. The SL metaphor seemed to immediately evoke the TL metaphor that was similar. However, since the mapping between the two domains did not overlap completely, it created confusion for the subjects. In these cases too, there were longer pauses and frequent back-tracking.

If the conventional expressions were simply associated with an arbitrary meaning, there should be no difference between finding a translation equivalent of these expressions, and finding a translation equivalent of other non-metaphorical expressions. There shouldn't really be any difference unless the metaphorical expressions were evoking some sort of image in the translator's mind and getting in the way of finding a good translation equivalent.

## 7. Conclusion

The theory of conceptual metaphors has a central role in cognitive linguistics. The basic premise of the theory is that a metaphor is not simply a stylistic feature of the language, but that thought itself is metaphorical in nature. However, it has not been very clear whether metaphoric thought functions in people's immediate on-line use and understanding of linguistic meaning.

The results from this study suggest that conceptual metaphors are accessed during the bilingual's comprehension of metaphorical expressions. This was found under conditions in which participants were not alerted to the metaphorical nature of the idiomatic phrases. Although the experiment discussed here was only a preliminary one, the results indicate that the parts where a translator had difficulty in translation were those where there was a significant difference in conceptualization between the two languages. The difficulty is manifested in the increased instances of mistranslation, back-tracking and the time it took for the bilinguals to come up with the translator. It can be assumed that the difficulty was caused by the added burden on the translator to change the conceptualization in the SL to the conceptualization in the TL.

An interesting finding from the experiment was that the subjects had the most difficulty in translating "false friends" metaphors. This, in a way, provides stronger evidence that the conventional expression is understood in terms of the conceptual metaphor. When there is similar conceptualization between the SL and the TL, the translator does not have to change the conceptualization entirely but needs to modify the details in the conceptualization. This is expected to create a greater burden due to the fact that he/she has to pay more attention to details compared to simply switching the entire conceptualization.

I hope that I have been able to show one way in which investigating the process of transla-

tion might be able to contribute to the field of cognitive linguistics and also that people who are in translation studies might be able to benefit from research in cognitive linguistics.

#### Note

1) This research was supported by Kansai University's Overseas Research Program for the year of 2008.

#### References

- Gibbs, Raymond W, Jr. 2007. 'Why cognitive linguists should care more about empirical methods'. In Monica Gonzalez-Marquez, Irene Mittelberg, Seana Coulson and Michael J. Spivey (eds) Methods in Cognitive Linguistics. Amsterdam: John Benjamins Publishing Company. 2-18.
- Kikuchi, Atsuko. 2007. 'Conceptual Systems and the Process of Translation' in Takeuchi, Osamu et al (eds) Explorations of English Language Instruction. Tokyo:Sanseido. 20-38

Lakoff, George and Mark Johnson. 1980. *Metaphors We Live By.* Chicago: University of Chicago Press. Lakoff, George. 1987. *Women, Fire, and Dangerous Things.* Chicago: University of Chicago Press.